



# CrossTalk

July 2025

66 Years Of Service To Amateur Radio & Our Community

Issue 66 : 07

## A 2025 Club Officers

<b>President :</b>	<b>Jonathan Pearce WB2MNF</b>	<b>Trustees - 4 Year Term</b>	
<b>Vice President :</b>	<b>Ronald Block NR2B</b>	<b>Charles Lanard KD2EIB</b>	<b>(2022-2025)</b>
<b>Treasurer :</b>	<b>John O'Connell K2QA</b>	<b>Sheldon Parker K2MEN</b>	<b>(2023-2026)</b>
<b>Recording Secretary :</b>	<b>John Zaruba Jr K2ZA</b>	<b>Len Rust W2LJR</b>	<b>(2024-2027)</b>
<b>Corresponding Secretary :</b>	<b>Michael Resnick N2WOQ</b>	<b>Earl Moore KC2NCH</b>	<b>(2025-2028)</b>

## Directors - 3 Year Term

<b>Chris Prioli AD2CS</b>	<b>(2023-2025)</b>	<b>Bill Price NJ2S</b>	<b>(2024-2026)</b>
<b>James Wright N2GXJ</b>	<b>(2023-2025)</b>	<b>Jeffrey Garth WB2ZBN</b>	<b>(2025-2027)</b>
<b>Al Arrison KB2AYU</b>	<b>(2024-2026)</b>	<b>Frank Romeo N3PUU</b>	<b>(2025-2027)</b>

### General Membership Meeting

Wednesday, July 02, 2025 @ 1900 Hours  
In-Person & **ZOOM : 914 7364 1808, 843147**

### Tech Saturday Forum

Saturday, July 12, 2025 @ 0900 Hours  
Saturday, July 19, 2025 @ 0900 Hours  
W2MMD Clubhouse

### License Testing Session

Thursday, July 10, 2025 @ 1900 Hours  
W2MMD Clubhouse

### Board of Directors Meeting

Wednesday, July 16, 2025 @ 1900 Hours  
W2MMD Clubhouse

Tuesday Afternoon 2M Net @ 1200 Hours

Thursday Night 2M Net @ 2000 Hours

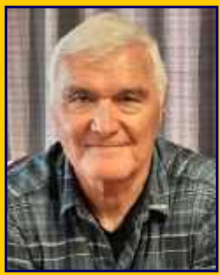
Monday & Thursday Night 40M Net @ 1930 Hours  
7.170 MHz (+/- 5 or 10 kHz)

**No Tech Saturday Forum on July 5, 2025**

**Clubhouse will be closed on July 26, 2025**

### Inside This Issue...

<i>President's Letter.....</i>	<i>Page 2</i>
<i>Welcome New Members .....</i>	<i>Page 5</i>
<i>July 2<sup>nd</sup> General Membership Meeting ....</i>	<i>Page 6</i>
<i>July 12<sup>th</sup> &amp; 19<sup>th</sup> Tech Saturday Forum.....</i>	<i>Page 7</i>
<i>KE2DRJ @ ARRL Teacher's Institute.....</i>	<i>Page 9</i>
<i>GCARC Family Picnic .....</i>	<i>Page 10</i>
<i>Regional Hamfest &amp; Events.....</i>	<i>Page 11</i>
<i>13 Colonies Special Event.....</i>	<i>Page 12</i>
<i>Monthly VE Session Summary .....</i>	<i>Page 13</i>
<i>DA's &amp; DIT's.....</i>	<i>Page 16</i>
<i>Fox Hunt 33 - Spring Fox Hunt.....</i>	<i>Page 17</i>
<i>Education Connection.....</i>	<i>Page 18</i>
<i>At The Repair Bench.....</i>	<i>Page 24</i>
<i>Celebrating 90 Years of ARRL ARES .....</i>	<i>Page 27</i>
<i>NG3K Announced DX Operations .....</i>	<i>Page 23</i>
<i>ARES SNJ Section Update.....</i>	<i>Page 28</i>
<i>ARES Red Cross Trailer Update.....</i>	<i>Page 29</i>
<i>W2TDS My Antenna Install - Part 1 .....</i>	<i>Page 32</i>
<i>Refocusing Amateur EmComms.....</i>	<i>Page 35</i>
<i>Element 4 Question Pool Quiz.....</i>	<i>Page 38</i>
<i>Comet MetEd Weather Education.....</i>	<i>Page 41</i>
<i>General Membership Meeting Minutes....</i>	<i>Page 48</i>
<i>Board of Directors Meeting Minutes.....</i>	<i>Page 49</i>
<i>DXCC Honor Roll .....</i>	<i>Page 51</i>
<i>July 2025 Birthdays.....</i>	<i>Page 54</i>
<i>July 2025 Contest Calendar .....</i>	<i>Page 57</i>
<i>Last Page Calendar .....</i>	<i>Page 60</i>



# *President's Letter*

## *Jon Pearce WB2MNF*



### **July 2025**

As President of the Gloucester County Amateur Radio Club, my role is to encourage the creation of resources and activities, promote engagement in those activities, and highlight that engagement. Typically, this letter shows an extensive calendar of Club activities and accomplishments, but June 2025 presents unique challenges. Field Day, our flagship event, consumes much of the month's preparations and occurs late - June 28-29 - past the CrossTalk deadline and preventing a report here. Additionally, I'll be away for much of June at an underwater photography workshop, missing some of Field Day and limiting my involvement in other activities this month.

Given these constraints, this letter shifts focus to some of my thoughts on a challenge to the Club's leadership : evaluating new technologies to increase adoption by non-ham tech followers and how we can structure the Club's activities to address them while balancing the interests of our existing users and those of a younger, technology-driven audience. I know that this isn't my usual format - please bear with me and I promise that I'll return to normal next month. As has become usual, AI helped research and craft the language of this article although the ideas and considerations are mine.

### **Balancing Activities for Older and Newer Hams**

The Gloucester County Amateur Radio Club has long been a haven for hams with diverse interests, and one of our ongoing challenges is balancing the needs of our older members, who thrive on traditional operating activities, with the emerging interests of newer hams. For many of our seasoned members, the essence of Amateur Radio lies in the time-honored pursuits of contesting, chasing DX contacts, engaging in rag-chewing sessions on the air, and participating in regular repeater nets - activities that have defined the hobby for decades and foster a sense of community through voice communication and competitive skill. This passion traces back to hams licensed before the mid-1970s, often self-described as "hackers" who built their own equipment from scratch, derisively referring to those who relied on commercial gear as "appliance operators." The advent of semiconductors and integrated circuits during the Heathkit era made homebrewing significant equipment impractical, and many hams licensed afterward have never built major projects, creating a potential divide with those who continue to experiment.

Meanwhile, newer hams, often drawn to the hobby through digital innovation or technical curiosity, seek different experiences that align with modern technology trends. This divide requires us to carefully structure our Club's offerings to honor the rich traditions that keep our veteran members engaged while creating pathways for newcomers to explore cutting-edge possibilities, ensuring that GCARC remains a welcoming space for all.

### **Critiques from Outside**

The Amateur Radio community has faced criticism from tech-savvy outsiders, particularly through online discussions from "hacker" sources, where strong opinions about the hobby's current state have emerged. These critiques often depict Amateur Radio as a stagnant, gate kept hobby dominated by an aging, unengaging community, suggesting that the focus on traditional activities like repeater nets - seen as repetitive and uninteresting - alienates potential new participants. Commenters have expressed disdain for what they perceive as outdated technology and restrictive regulations, arguing that the hobby's accessibility barriers, such as complex licensing requirements and a lack of modern digital integration, deter younger tech enthusiasts.

*President's Letter - Continued on page 3*

Online discussions have described it as a “dying relic” held back by “old-timers who resist change,” highlighting a disconnect between the hobby’s current image and the dynamic, open-source world that many tech followers inhabit.

### **Challenges in Addressing New Interests and Club Structure**

Addressing the needs and interests of this younger, tech-oriented group poses a significant challenge for GCARC, requiring a thoughtful integration of their preferences into our Club’s structure without alienating our established members. **Steve Stroh N8GNJ’s Zero Retries newsletter** ([zeroretries.substack.com](http://zeroretries.substack.com)) consistently follows this issue, researching and explaining new ideas, and his thoughts form the basis of many points in this article. Some of this difficulty lies in recognizing that younger users, accustomed to digital communication methods like texting and messaging apps, show little interest in the verbal aspects of ham radio that have long been central to the hobby, such as rag-chewing or repeater chats, preferring instead the efficiency and familiarity of text-based interaction. This contrasts sharply with traditional hams for whom contesting or DXing are ends in themselves, driven by the thrill of the chase or social interaction. Importantly, our current approach of “selling” ham radio as a way to talk to distant stations or on local repeaters doesn’t resonate with a group who doesn’t want to talk at all. The traditional messaging approaches won’t work with this group.

Additionally, many of these new participants view radio not as an end in itself but as a “pipe” through which information reaches a user at a different location, prioritizing the data’s utility over the act of operating. This approach combines the radio function with a “data origination” function such as a sensor or camera and a “data consumption” function such as a display or processor. The radio gets connected to other components such as a Raspberry Pi computer and users need to have the same knowledge of the Pi as they do of the radio. Radio plays the part of moving the data from one point to the other but it’s not the only component and it’s a means to an end, not the end in itself. This dichotomy is not easy to address.

### **Radio as a Data Pathway and Tech Saturday Opportunities**

To bridge this gap, we must adapt our programming while preserving the core of what keeps our Club active. One practical approach is leveraging the distinct attendance patterns at our General Membership Meetings - largely attended by older hams interested in traditional topics - and our Tech Saturday Forums, which attract a smaller, technology-focused group. This separation allows us to tailor activities accordingly, ensuring both groups find value in GCARC’s offerings.

The concept of radio as a “pipe” for data movement, rather than an end goal, along with digital messaging replacing traditional voice communication, opens exciting possibilities for engaging non-ham tech followers and aligns with the innovative spirit of our Tech Saturday Forums. This perspective suggests that the value lies in what the radio transmits - data for education, science, or community use - rather than the operation itself.

To capitalize on this, we can explore several Tech Saturday Forum activities that showcase these capabilities, serving as examples from which we can draw actual sessions, with many other options available depending on member interest and resources. Additionally, cost remains a barrier for some prospective hams, so we’ll also consider sessions that address affordability :

- **Packet Radio with DireWolf and APRS :** Members could build a station using a Raspberry Pi and a low-cost HT to create and send APRS packets with environmental data, offering a hands-on introduction to data networking that could be replicated in STEM classes.

- **Environmental Monitoring with Packet Radio :** Building a station to monitor environmental data (e.g., air quality) using packet radio with DireWolf and APRS, offering a practical data-sharing project that could attract non-ham tech followers and support STEM outreach.
- **WSPR for Science Experiments :** Setting up a WSPR station with a temperature sensor and an HF rig to log climate data, providing an opportunity to experiment with weak signal propagation and share results with remote users, appealing to tech enthusiasts and students alike.
- **DATV Using a Pluto SDR :** Delving into digital ATV transmission and reception with a PlutoSDR (ADALM-PLUTO), utilizing its software-defined capabilities to experiment with video streaming, offering a cutting-edge project to engage tech-savvy participants.
- **DigiPi Project :** Constructing a DigiPi transceiver hotspot to support modes like Winlink and FT8, managed via a web interface, offering a versatile platform for data communication that could engage both members and non-ham tech followers.
- **KA9Q-Radio Exploration :** Diving into Phil Karn's KA9Q-Radio software for SDR experimentation, allowing participants to explore digital modes and extend the software, fostering a collaborative, tech-driven environment. <https://github.com/ka9q/ka9q-radio>
- **Firmware Upgrading and Testing of a TID Radio :** Upgrading and testing firmware on a low-cost TIDRADIO (e.g., H3), providing an affordable entry point for prospective hams and an opportunity to experiment with software customization, addressing cost barriers while appealing to tech enthusiasts.
- **Use of Text-Based Communication Tools such as JS8Call or VarAC :** Exploring hybrid text-based messaging over radio using JS8Call ([js8call.com](http://js8call.com)) or VarAC ([www.varac-hamradio.com](http://www.varac-hamradio.com)), offering a practical way to engage with digital communication preferences and support emergency or educational data sharing.

These activities, tailored for the Tech Saturday Forum audience - typically a smaller group interested in newer technologies - complement the traditional focus of General Membership Meetings, creating a balanced approach that respects our heritage while inviting a new wave of participants into the Amateur Radio community. We'll sort thru them in the coming months and will set up sessions for those that appear promising.

### **Return to Normal Format**

This month's letter may lack the usual event updates due to my absence and Field Day's timing, but hopefully it provides some content for further discussion. I'll be back in August with more hands-on news, returning to our standard format to highlight our ongoing projects and successes.

**73 de Jon Pearce WB2MNF**



## Welcome New Club Members :

**Denver Edwards KE2GFG**, a Technician Class who lives in Elmer, NJ.

**Rosemarie Newman KE2DPP** (Returning Member), a General Class from Millville, NJ.

**Ronald Newman KE2DPO** (Returning Member), a General Class from Millville, NJ.

**Aidan Pham KE2GFK** (Student Member), a Technician Class who lives in Mickleton, NJ.

We are glad to have you as a member of the Club and hope to see you regularly at Club meetings, events, and activities. Hope to see you at :

- **The July 2<sup>nd</sup> General Membership Meeting, either in-person or on ZOOM**
- **The July 12<sup>th</sup> and July 19<sup>th</sup> Yagi Antenna Building Classes**
- **The Board of Directors Meeting on July 16<sup>th</sup>**
- **The Dinner at the Clubhouse on July 23<sup>rd</sup>**

We also hope to “SEE” you on the “AIR” on the following nets :

- **Sunday Night Skywarn 2 Meter Net @ 1930 Hours.**
- **Sunday Night ARES 2 Meter Net @ 2000 Hours.**
- **Tuesday Afternoon 2 Meter Net @ 1200 Hours.**
- **Monday & Thursday Night 40 Meter Nets on 7.170 MHz (+/- 5 or 10 kHz) @ 1930 Hours.**
- **Thursday Night Rag Chew 2 Meter Net @ 2000 Hours.**

All 2 Meter Nets are on our 147.180 MHz (PL 131.8) repeater or on EchoLink W2MMD-R.

## Gloucester County Amateur Radio Club Elmers

We are still looking for some more Club Elmers. If you would to add your name to the Elmer's List, send your specialty to [w2mmdgcarr@gmail.com](mailto:w2mmdgcarr@gmail.com). Here is what we have so far :

- **Tony Starr K3TS : Antenna Construction; Contesting; CW Help and Training**
- **Ken Bozarth KN2U : Antennas**
- **Jeff Welsh KD2AZI : Boat Anchor Repair & Operation; Raspberry Pi; Arduino; Python; POTA; Mobile Installation & Operating**
- **Karl Frank W2KBF : Digital Messaging (FLDIGI, WinLink)**
- **Lenny Rust W2LJR : DMR Radios & Programming**
- **Ron Block NR2B : Lightning Protection & Grounding**
- **Chris Prioli AD2CS : Kit Building; Antenna Building; Radio Programming; PC and Electronic Troubleshooting; Ham Radio Licensing & Studying**
- **John Zaruba Jr K2ZA : Yaesu System Fusion Radio Programming; POTA; SOTA; CW Learning & Operating**
- **Jerry Barnish K2EAB : Radio Astronomy**
- **Mike Thompson KG4JYA : Radio Astronomy; VARA (HF and FM); WinLink**
- **Steve Farney W2SEF : WSJT-X; FT-8; LoTW; TQSL; Grid Square**
- **Carl Wittig N2CRW : Audacity® Audio Editor**
- **Gary Mirkin WA3SVW : FLDIGI; MMSSTV**
- **Jon Pearce WB2MNF : Satellite Communications**
- **Frank Romeo N3PUU : Toilet Installer; Jack-Of-All Trades - Master Of None**
- **John Hill W2HUV : Local & Remote W2MMD HF Station Operation; Training & Support**
- **Dave Sheppard W2PAX : National Traffic System**
- **Bob Pantazes W2ARP : How To Properly Manage QSL Cards**

# General Membership Meeting

**Wednesday, July 02, 2025 @ 1900 Hours**

# Pfeiffer Community Center

**Simulcast Live Via ZOOM : Meeting ID : 914 7364 1808; Passcode : 843147**

**Join ZOOM Meeting Link : <https://bit.ly/3Pt4dLO>**

**Go to : <https://gloucestercountync.weebly.com/2025-content--activities--resources.html> to download the ZOOM log-on instructions PDF**



## Tech Saturday Forum

July 12 & 19, 2025 @ 0900 Hours

W2MMD Clubhouse

### Forum Topic : Fox Hunt Attenuated Tape Measure Yagi Build Class By Professor Chris Prioli AD2CS

The session is a two-day affair, with the build taking place on **Saturday, July 12, 2025** and **Saturday, July 19, 2025**. This is a one-off build that will take us two weekend sessions to complete, as it did last year. All necessary materials will be supplied.

On the first day (**July 12<sup>th</sup>**) of the two-day class, we will build and test the **KC90N** attenuators, which come in kit form with all required parts included. On the following Saturday (**July 19<sup>th</sup>**), we will assemble the antennas and install the attenuators to the antennas.

There are a very limited number of seats available, so it is best to sign up now to increase your odds of getting a seat in this class.

At this point, the plan is to take the first twelve registrants into the session.

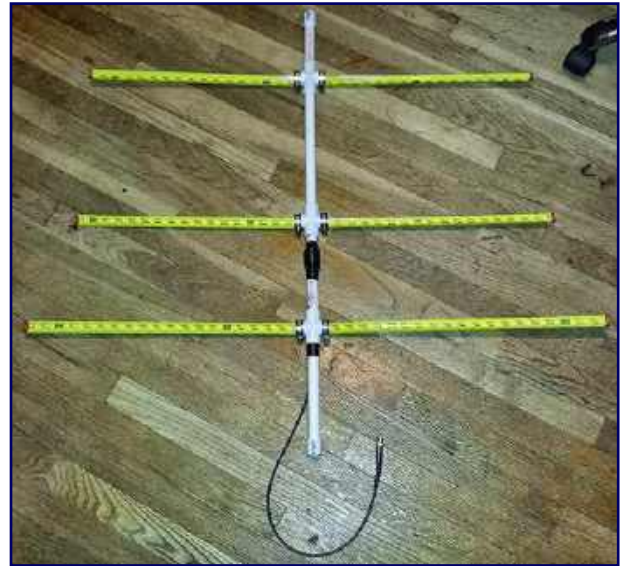
Chris currently have registrations from the following individuals :

- **Diane Amico W2WHD**
- **Chris Angelastro KE2DST**
- **Rick Bleda KC2SGR**
- **Alex Duboski KB2YEF**
- **Darrin Malone KD2ALQ**

Chris will give an update about this class at the **July 2<sup>nd</sup> General Membership Meeting**.

The cost this year is a modest **\$60**, up slightly from last year's figure. This is due to the across-the-board increase in parts and materials costs. Remember that these are highly-tuned receive antennas, and as such are not intended for use as transmitter antennas.

Interested students can go to Tape Measure Yagi Build - GCARC Payments and Registration Portal :  
<https://registration.w2mmd.org/wpregp/tape-measure-yagi-build>







Club member Angela Metzger KE2DRJ participating in the ARRL Teachers Institute On Wireless Technology

**There is a new website for the Gloucester County Amateur Radio Club Volunteer Examiner Team. Everything you need to know about getting your ham license or upgrading your license can be found on this website. Pass It Around!**

**<https://veteam.w2mmd.org>**



**Gloucester County Amateur Radio Club  
YouTube Channel**

**<https://www.youtube.com/@W2MMD>**

***“Dinner @ The W2MMD Clubhouse”  
Wednesday, July 23, 2025 @ 1800 Hours  
W2MMD Clubhouse***



# Exploring Wireless Technology : A Week at the ARRL Teachers Institute

By Angela Metzger KE2DRJ

Attending the ARRL Teachers Institute on Wireless Technology was an unforgettable experience that brought hands-on STEM learning to life. The week-long program immersed educators in the fundamentals of wireless technology, amateur radio, and practical electronics with a strong focus on classroom integration.

One of the first topics we explored was electromagnetic waves - the foundation of all wireless communication. Through engaging lessons and demonstrations, we deepened our understanding of wave behavior, frequency, and propagation, setting the stage for the week's hands-on projects.

Early in the institute, we dove into soldering by building a functional FM radio from a kit. For many of us, this was a first-time experience, and it was incredibly rewarding to hear the radio after some tenuous assembly.

After practicing our soldering skills with the FM radio we moved on to constructing an attenuator, a tool for one of my favorite activities of the week : fox hunting. Using our new Yaesu FT-70DR HT's and Arrow Yagi antennas (2m and 70cm), we participated in this real-world radio direction-finding exercise, simulating search-and-rescue operations and honing our signal-tracking skills.

The institute introduced us to computing with the Raspberry Pi, a small but powerful tool for running radio software, coding, and integrating technology projects into the classroom. We also explored Software-Defined Radio (SDR) and ZUMspots gaining insights into how digital processing has revolutionized the way we interact with the radio spectrum.

As part of the institute, we received a variety of tools and resources to take back to our schools. In addition to the aforementioned Raspberry Pi, Arrow antenna and Yaesu HT, each participant received a Retevis RA79 HT, an Etron basic electronics kit, a RTL-SDR with antenna, a digital multimeter, a fox transmitter, a ZUMspot and lots of parts to build additional antennas. These tools empower us to bring wireless technology directly into our classrooms and inspire the next generation of radio amateurs, engineers, and technologists.

I would like to take the time to thank the GCARC for sponsoring me for this event. The ARRL Teachers Institute didn't just teach content - it sparked enthusiasm, built confidence, and provided a vibrant community of educators committed to advancing STEM education through amateur radio. I would like to encourage you to donate to the **ARRL Education and Technology Fund** (<https://home.arrl.org/action/Donate/Education-Technology-Fund>). Without the generous contributions of donors I would not have had this amazing opportunity.



**Great Attendance & Great Food At The GCARC Family Picnic : May 31, 2025  
Big Thank You To Kathy, Frank, and all who contributed to a Successful Picnic**





## Regional (Atlantic & Hudson Divisions) Hamfests & Events

**July 05, 2025 :** Harrisburg Radio Amateurs Club, Firecracker Electronics Expo & Hamfest, Harrisburg Postal Employees Picnic Grounds, 1500 Roberts Valley Road, Harrisburg, PA. [www.w3uu.org](http://www.w3uu.org)

**July 06, 2025 :** Murgas Amateur Radio Club, 2025 Murgas ARC Hamfest, Polish American Veterans, 2 South Oak Street, Plains, PA. [www.murgasarc.org](http://www.murgasarc.org)

**July 12, 2025 :** Wattsburg Wireless Association Amateur Radio Club, 2025 NW PA Hamfest, Greene Township Municipal Building, 9333 Tate Road, Erie, PA. [www.wattsburgwireless.org](http://www.wattsburgwireless.org)

**July 12, 2025 :** Radio Amateurs of Greater Syracuse, Roger's RAGS Hamfest, Camillus Elks Lodge #2367, 6117 Newport Road, Camillus, NY. [www.ragsclub.org](http://www.ragsclub.org)

**July 13, 2025 :** Sussex County Amateur Radio Club, ARRL Hudson Division Convention & 46<sup>th</sup> Annual SCARC Hamfest, Sussex County Farm & Horse Show Fairgrounds, 37 Plains Road, Augusta, NJ. [www.scarcnj.org](http://www.scarcnj.org)

**July 19, 2025 :** Lancaster Amateur Radio Club, Batavia Hamfest, Alexander Firemen Grounds, 10708 Alexander Road, Alexander, NY. [www.w2so.org](http://www.w2so.org)

**July 20, 2025 :** Somerset County Amateur Radio Club, Hamfest, Somerset County Technology Center, 281 Technology Drive, Somerset, PA. [www.k3smt.org](http://www.k3smt.org)

**July 26, 2025 :** Utica Amateur Radio Club, RadioCom 2025, Clark Mills Firehouse Grounds, 7705 County Road, Clark Mills, NY. [www.uticaarc.org](http://www.uticaarc.org)

# 17th Annual 13 Colonies Special Event

JULY 1ST - 7TH 2025



K2A/NY



K2B/VA



K2C/RI



K2D/CT



K2E/DE



K2F/MD



K2G/EA



K2H/MA



K2I/NJ



K2J/NC



K2K/NH



K2L/SC



K2M/PA



<http://www.13colonies.us>



LIBERTY TREE  
AN APPEAL TO GOD  
1776

THIS CERTIFICATE CERTIFIES THAT ARS: **KU2US** HAS PARTICIPATED IN THIS ON - AIR AMATEUR RADIO EVENT HONORING THE ORIGINAL THIRTEEN COLONY STATES, OUR INDEPENDENCE, & OUR ACTIVE MILITARY / VETERANS. 

THIS YEAR'S EVENT HONORS KEN VILLONE (KU2US), WHO CREATED THE 13 COLONIES SPECIAL EVENT IN 2009



ALL SSB 



WM3PEN 

13 CONTACTS

Event Manager 2009 • 2024



## **13 Colonies Special Event July 1 - 7, 2025 : <http://www.13colonies.us>**

### **Recognizes Ken Villone, KU2US, Event Founder**

In just a few days, one of the most popular summer operating events kicks off - The 13 Colonies Special Event. Now in its 17 year the event has grown from Special Event Stations making approximately 12,000 contacts to last year making 292,496 contacts around the world. The Event runs from July 1 9:00 AM -July 7 Midnight Eastern (July 1 - 1300 UTC - July 8 - 0400 UTC).

This year event organizers are recognizing the 13 Colonies Special Event founder Ken Villone, KU2US, who is passing the torch on to Tony Jones, N4ATJ. For the past 16 years Villone has lead the event by working with state and bonus station coordinators. Then after the event he would print out individual certificates for thousands of people who made contact with the special event stations.

The Special Event consist of one station operating in each of the 13 Colonies (K2A - K2M) and three bonus stations (WM3PEN - Philadelphia, GB13COL - England, TM13COL - France) each representing their city, state, or countries role in America's Colonial period.

#### **Villone describes how the event got started :**

"I had just finished participating in the ARRL Sweepstakes in 2008, and remarked how fun it was. I could not figure out why there were not more of these type special events on the air? So I decided to try my luck and create one for one year only to see what happens and to have some fun. I knew we had to offer a special QSL card and/or certificate plus have on hand a printer and supplies. The hard part was deciding what the event would commemorate and when to do this. I needed a theme that ALL could relate to! Also the event would have to be the type with multiple event stations involved, like the ARRL Sweeps.

Then it hit me! 13 Colonies states, during the 4<sup>th</sup> of July week and offer a certificate with the theme for the year. I made sure the theme was different each year with a different certificate design, to make it interesting and to also make the certificate collectable. The theme would highlight some event or thing connected to the American Revolution. The event was held July 1<sup>st</sup> to the 4<sup>th</sup>, 2009, 4 days with no advertising except on QRZ. I had a hard time getting 13 different Ops, one from each Colony state but it worked out. All in all it was a success! We did over 12,000 contacts the first year. I decided we have a good thing going so I recruited another Op from each state and ran the event the next year in 2010. We did over 32,000 contacts in 2010, and had 26 state operators total. There was a 13 Colonies special event in 1962 but only lasted one year, according to my research. (I was 13 years old)."

Ham Radio operators and SWLs can participate in the event. Complete information about the call for each colony station and the bonus stations can be found on the event website [13colonies.us](http://www.13colonies.us) and they can follow us on Facebook - 13 Colonies Special Event Community. Stations need only make one contact with one of the participating stations or they can go for a Clean Sweep and work all 13 Colony stations and the 3 bonus stations. Each station offers a special QSL card for the event as well as a different certificate each year. Operators can keep an eye out for the special event stations by watching many of the DX spotting networks such as [DXSummit.fi](http://www.DXSummit.fi).

#### **Operating Tip :**

##### **Avoid Repetition :**

**Do not repeat your call or the exchange unless conditions warrant it. If the station you're working missed part of the exchange, they will ask you for a fill.**

**Thanks to Dan Zeitlin, K2YWE, and Contest University**

## **GCARC Monthly VE Exam Testing Summary - June 2025**

**By Chris Prioli AD2CS**

June 2025 was a busy month for VE sessions, and there was one session at the end of May which occurred after the May report was submitted, so that too will be reported here.

Let's start with the session on Friday 23 May, held at the Woodruff Middle School in Upper Deerfield Township, NJ, held exclusively for the students in the STEM Club there. While the names of the minor students have been redacted here, suffice it to say that six students tested for the Technician (Element 2) exam, none of which were successful, as more preparation was clearly needed.

This session was attended by three GCARC VE volunteers, as follows :

- **Mike Resnick N2WOQ**
- **Mike Thompson KG4JYA**
- **Chris Prioli AD2CS**

On Friday 6 June, after several review sessions were held for the students, another exam session was held, and this time three students attempted the Technician exam. Again, none were successful, but all elected to attempt the exam one more time, with unfortunately no better result. These students are clearly at a disadvantage in not having had the life or school experience to prepare them for this exam, so all that they can do is to memorize the answers.

This session was attended by three GCARC VE volunteers, as follows :

- **Rich Subers W2RHS**
- **Steve Farney W2SEF**
- **Chris Prioli AD2CS**

Next up was a special session held for the students in the GCARC Session IX Ham License Preparation Classes. This session was held on Tuesday 10 June at the W2MMD Clubhouse. In addition to the students from the class, we had one visiting candidate, thanks to the session being listed on HamStudy.org. The following candidates were present for this exam session :

- **Troy P Clancy KE2BXW of Franklinville, NJ**
- **Denver Edwards KE2GFG of Elmer, NJ (newly issued call sign)**
- **Andrei Griko KE2GFH of Egg Harbor Township, NJ - our visitor (newly issued call sign)**
- **Anish James KE2DRI of Mount Laurel, NJ**
- **Frank Parsinitz KD2GSY of Gibbsboro, NJ**

Troy, Anish, and Frank all attempted the General (Element 3) exam, while Denver and Andrei attempted the Technician (Element 2) exam. With the exception of Anish, all were successful (more about Anish later), though Troy then unsuccessfully attempted the Amateur Extra (Element 4) exam. This session was attended by four GCARC VE volunteers, as follows :

- **John O'Connell K2QA**
- **Steve Farney W2SEF**
- **Jeff Garth WB2ZBN**
- **Mike Harla N2MHO**

*VE Exam Testing Summary - Continued on page 14*

The regular monthly VE session was then held on Thursday 12 June at the W2MMD Clubhouse. There were four exam candidates :

- **Anish James KE2DRI of Mount Laurel, NJ**
- **Aidan Pham KE2GFK of Mickleton, NJ (newly issued call sign)**
- **Arfan Qureshi KE2GFP of Cherry Hill, NJ (newly issued call sign)**
- **Ibrahim Qureshi of Cherry Hill, NJ**

Anish earned his General (Element 3) license, and then unsuccessfully attempted the Amateur Extra (Element 4) exam. Aidan earned his Technician (Element 2) license, and then went on to attempt the General (Element 3) exam, but did not pass that one. Arfan took the Technician (Element 2) exam twice before prevailing and earning his Technician license, while Ibrahim, a youthful candidate and son of Arfan, apparently needed more preparation.

This session was attended by four GCARC VE volunteers, as follows :

- **MaryLu Ciraula K3MLC**
- **Greg Ciraula K3GC**
- **Court Smith KD2SPJ**
- **John O'Connell K2QA**

The VE Team proctored exam sessions using mostly electronic methodologies - some of the STEM Club candidates wanted to test on paper and were permitted to do so. This means that most of the candidates completed the exams online, and that all grading and submissions were done online as well.

All VE sessions reported herein were led by GCARC VE Team Liaison Chris Prioli AD2CS.

The next regularly scheduled VE session will be held on Thursday, 10 July 2025, at 1900 Hours at the W2MMD Clubhouse. The VE team will be using the new ExamTools system to its fullest capability, within our current technological means.

It is important that all test candidates going forward will be advised, whenever possible, to pre-register and pre-pay for the exam online. Specifics of that process are explained at : <https://veteam.w2mmd.org>

### **Need a ride to a Club meeting, event, or activity?**

**Just send a message to the Club's e-mail reflector asking if a member can pick you up**

**[GCARC <at> MAILMAN <dot> QTH <dot> NET](mailto:GCARC@MAILMAN.QTH.NET)**

**All Club members have access to this FREE e-mail service**

### **So you find our website confusing, can't find anything**

**I have created a page called "Quick Links"**

**On this page you will find "Buttons" to some the most popular pages  
I will add more as time goes on, but I hope this helps your journey navigating  
through your Club Website!**

**<https://gloucestercountycastle.weebly.com/quick-links.html>**



**Membership Badges Ready For Pick-up.**  
*They can be picked up at the W2MMD Clubhouse or  
at the monthly General Membership Meetings*

**Dave Danichkin KD2UXC**  
**Jim Foster W3JNF**

**Jack Snyder AI2D**

**New Members Support Group & Discord Channel**

- Organized By Jim Beury KE2DRN
- Objective : To focus Club resources on the needs of newly licensed members
- Supported by “new\_members” Discord Channel

**Additional Support :**

- Saturday Morning @ The W2MMD Clubhouse
- GCARC@MAILMAN.QTH.NET Club E-mail Reflector
- E-Mail President @ w2mmd.org



**NTS Resources**

The National Traffic System® (NTS) is a network of Amateur Radio operators who move information during disasters and other emergencies. General messages offering well wishes also move through the NTS to help test the system and to help Amateur Radio operators build traffic handling skills. While the NTS is primarily set up to serve the United States and Canada, it is possible to move traffic internationally through the NTS through various local, regional, area, and international network connections.

- ♦ NTS 2.0 : <https://nts2.arrrl.org>
- ♦ NTS Manual : <https://www.arrrl.org/nts-manual>
- ♦ NTS Methods and Practices Guidelines Table of Contents : <https://www.arrrl.org/table-of-contents-nts-methods-and-practices-guidelines>
- ♦ Handling Instructions : <https://nts2.arrrl.org/hx-handling-instructions>
- ♦ Numbered Texts : <https://nts2.arrrl.org/numbered-texts>
- ♦ Form Encoding Rules for Form : <https://nts2.arrrl.org/form-encoding-rules-for-forms>

## DAs and DITs

>> Congratulations to the following Club Members who upgraded to General Class :

- Troy Clancy KE2BXW
- Anish James KE2DRI
- Frank Parsinitz KD2GSY

>> Chris Prioli AD2CS, reports, Solar Weather For Hams : <https://solarcdx.com> - Best one stop web page for ham radio operators wanting to know about solar conditions as it affects Amateur Radio.

>> Condolences to Glenn Dougherty N2YIO and family on the loss of his sister.



June 7, 2025 Tech Saturday Forum  
Great attendance for the Intro To Field Day presented by Jim Wright N2GXJ

W2MMD



[www.facebook.com/W2MMD](https://www.facebook.com/W2MMD)

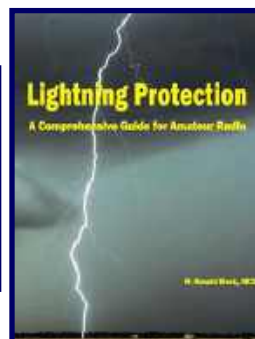


[twitter.com/w2mmd\\_gcarc](https://twitter.com/w2mmd_gcarc)

Facebook



**Lightning Protection :**  
A Comprehensive Guide for Amateur Radio  
Author : W. Ronald Block, NR2B  
Contact : [ron@wrblock.com](mailto:ron@wrblock.com)  
Website : [www.wrblock.com](http://www.wrblock.com)





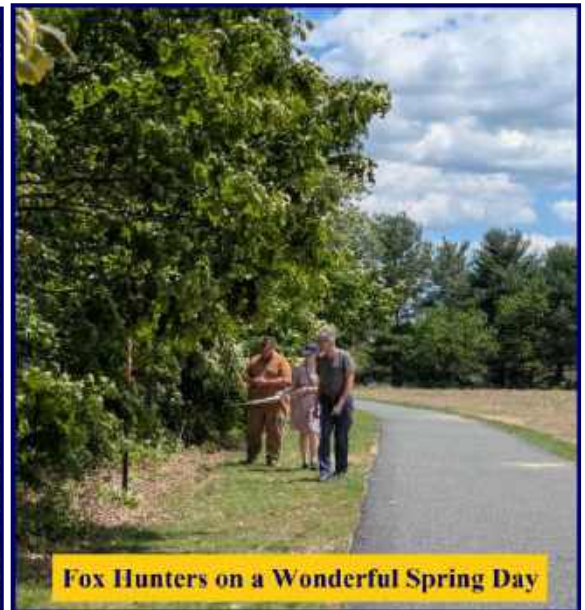
# Fox Hunt 33 - Spring Fox Hunt

Sunday, May 18, 2025 was a bright sunny day, perfect for Fox Hunt 33. The fox was hidden on a bike path that passes behind Bunker Hill Middle School on Pitman Downer Road.

In the hunt pack this time was an aspiring ham named Nathan Green and his sister. Nathan read about our hunts on the Club website and emailed asking if he would be able to participate if unlicensed. Jim Wright N2GXJ spoke with Nathan, invited him out to a meeting, and spent some time answering questions and performing introductions. Nathan took the initiative to build himself a tape measure beam, came out and successfully found the fox!

Order of finish :

1. Al Arrison KB2AYU
2. Nathan Green (No Call) along with his sister







## *The Education Connection*

By Chris Prioli AD2CS - [chris@ad2cs.com](mailto:chris@ad2cs.com)  
[www.ad2cs.com](http://www.ad2cs.com)



### July 2025

So here it is, nearing the end of June, which means that the GCARC Ham Exam Preparation Class Session IX is now fully in the rear-view... well, almost! While the General (Element 3) class went very well, with all three students earning their General licenses, I cannot really say the same about the Technician (Element 2) class.

We started out with three registered students and one licensed individual who had asked to audit the class as a refresher, which I readily permitted. We actually had four registered students, but one of them had to back out before the sessions began due to a work schedule change, which left us the three that I mentioned. Of those three students, one of them ghosted us after the second meeting, but then showed up again at the ninth meeting, but then disappeared again. A second student left for a stated two-week hiatus for a work trip, but never came back at all... until the Monday after the test session, at which time I received a phone call from the student, who was at the Club-house expecting a meeting that evening. That happened due to an error in the published class meeting schedule on the GCARC website, which I had never looked at. Heck - I know when my classes are, and I tell my students as well. I don't expect them to be relying on website information for the meeting schedule, but it looks like I now have to ensure that the data published there is completely accurate.

I suggested that the student, who was wanting to test for the license, should come back to the 10 July regular monthly VE session and test then and there. I was assured that if the schedule permitted that to happen, the student would show up then for the exam.

That leaves one solitary student who sat for the Technician (Element 2) exam and successfully earned his license. My congratulations and thanks go out to **Denver Edwards KE2GFG**, the new Technician, and to **Troy Clancy KE2BXW**, **Frank Parsinitz KD2GSY**, and to **Anish James KE2DRI**, who all earned their General licenses. Under the current GCARC promotion, Denver, Troy, and Frank all qualify for Club reimbursement of their \$15 exam fee, and I will make that happen promptly.

On a different topic, we are now gearing up for the tentatively-scheduled 12 July and 19 July build dates for the tape measure Yagi fox hunt antennas. At the May 2025 General Membership Meeting, we had about a dozen individuals express an interest in participating in this build. A sign-up announcement has now gone out twice in the last couple of weeks, but at this point I have only seven individuals registered for the classes. Please register now for the classes if you intend to participate. I was surely convinced from the response at the meeting that this class would fill up quickly, but that does not seem to be the case. Due to the parts and materials sourcing situation, I must place a hard cutoff date of 30 June for registrations for this program. **DO NOT MISS OUT ON THIS CLASS!** As in the past, this antenna will include the 4MHz offset attenuator as an integral part of the overall antenna build.

Finally, it appears that the Fall 2025 Ham Exam Preparation Class (Session X) will finally include an Amateur Extra class, as I now have one registration on file, and I have heard from four other people who claim that they want to attend. You folks know who you are... so please register for the class as soon as possible so that I can plan properly for the Fall session. Registrations can be completed on the Club website at : <https://gloucestercountyarac.weebly.com/license-classes.html>.

**That's it for now...See you next month!**

## GCARC VE Team : 2025 License Exam Monthly Summary

	Technician Class		General Class		Amateur Extra Class	
	Monthly	YTD	Monthly	YTD	Monthly	YTD
January	0	0	0	0	0	0
February	2	2	0	0	1	1
March	1	3	2	2	0	1
April	0	3	0	2	1	2
May	1	4	1	3	1	3
June	4	8	3	6	0	3
July						
August						
September						
October						
November						
December						

### New ZOOM Guidelines For General Membership Meetings

To enhance the experience for everyone attending the General Membership Meeting, whether in person or via Zoom, the Board of Directors has established some guidelines for Zoom participants. These guidelines are designed to ensure that everyone can focus on the meeting while also allowing Zoom participants to interact before the meeting starts.

**Here are the guidelines:**

- **Before the Meeting :**
  - ◆ Zoom participants are welcome to keep their cameras and microphones on to chat among themselves before the meeting begins. During this time, the Zoom audio will not be broadcast to the general audience, and local audio will not be connected to the Zoom meeting.
- **During the Meeting :**
  - ◆ Just before the Pledge of Allegiance, a reminder will be posted for Zoom participants to mute their microphones and turn off their cameras. This ensures that all Zoom participants will see the meeting camera instead of another Zoom participant's camera. Participants in the room never see the cameras of the Zoom participants.
  - ◆ Zoom participants can use the "*Raise Your Hand*" button to ask questions or make comments at appropriate times during the meeting. The Zoom operator will notify the moderator, who will recognize the comment or question at the right time.
- **After the Business Meeting :**
  - ◆ The Zoom audio will be muted immediately after the business meeting concludes to prevent any disruptions to the in-person audience from the PA speakers.

Please adhere to these guidelines to ensure a smooth and enjoyable meeting experience for everyone. Following these protocols will help us maintain an inclusive and focused environment for both in-person and remote attendees. Thank you for your cooperation!



## Highlights from the May 10<sup>th</sup> and May 17<sup>th</sup> Wattmeter Building Classes

Assembled Wattmeter





# 7<sup>th</sup> Annual ARRL SNJ Section Convention



Celebrating Our 66<sup>th</sup> Year

[www.w2mmd.org](http://www.w2mmd.org)

Presented By The

**Gloucester  
County  
Amateur Radio  
Club**

**W2MMD**



Open To The Public At 8:00 AM : *Rain or Shine*

**47<sup>th</sup> Annual Hamfest : Sunday, September 7, 2025**

**ADMISSION : \$10.00**

*Non-Ham Spouses and Kids FREE*

*Vendors and Tailgaters of new and used  
radio and electronic equipment*

**Monday & Thursday Night 40 Meter Net @ 1930 Hours**

**7.170 MHz (Plus or Minus 5 to 10 kHz )**

**NCS : Jim Clark KA2OSV**

## **ADIF Logs Wanted When Operating As W2MMD @ The Clubhouse**

By Jim Wright N2GXJ - Contact me via e-mail on Club Roster List

It is a common courtesy in ham radio to be able to QSL 2-way contacts made with other hams. We're pretty good about doing this for our field day contacts made each year, but are falling behind in this for contacts we make from the Clubhouse as W2MMD.

**So here is the ask :**

If you operate from the Clubhouse as W2MMD (e.g. on HF, UHF/VHF, or on Satellite, at Tech Saturday, or during contests or other), please email me the electronic log entries in ADIF format from the logger program you used for those contacts?

That way, just like I do following field day each year, I can get them uploaded to LOTW and to eQSL to offer the courtesy of an electronic QSL to those who make contact with us as W2MMD here in NJ.

**Thank you**



## Tuesday Afternoon Net @ 1200 Hours



### Net Control Stations :

Steve Farney W2SEF; Rich Subers W2RHS;  
Greg Ciraula K3GC; & Jeff Garth WB2ZBN

## 147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

Here is the schedule for the upcoming weeks

Greg Ciraula K3GC : July 1, 2025  
Steve Farney W2SEF : July 8, 2025  
Rich Subers W2RHS : July 15, 2025  
Jeff Garth WB2ZBN : July 22, 2025  
Steve Farney W2SEF : July 29, 2025

Greg Ciraula K3GC : August 5, 2025  
Steve Farney W2SEF : August 12, 2025  
Rich Subers W2RHS : August 19, 2025  
Jeff Garth WB2ZBN : August 26, 2025

Greg Ciraula K3GC : September 2, 2025  
Steve Farney W2SEF : September 9, 2025  
Rich Subers W2RHS : September 16, 2025  
Jeff Garth WB2ZBN : September 23, 2025  
Steve Farney W2SEF : September 30, 2025

If you would like to be a Net Control Station for this net, please contact Steve Farney W2SEF



## Thursday Night Rag Chew Net @ 2000 Hours



### Net Control Stations :

Mary Delemarre W2TDS; Gary Mirkin WA3SVW;  
Steve Farney W2SEF; & Jeff Garth WB2ZBN

## 147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

Here is the schedule for the upcoming weeks :

Jeff Garth WB2ZBN : July 3, 2025  
Mary Delemarre W2TDS : July 10, 2025  
Gary Mirkin WA3SVW : July 17, 2025  
Steve Farney W2SEF : July 24, 2025  
Jeff Garth WB2ZBN : July 31, 2025

Steve Farney W2SEF : August 7, 2025  
Mary Delemarre W2TDS : August 14, 2025  
Gary Mirkin WA3SVW : August 21, 2025  
Steve Farney W2SEF : August 28, 2025

If you would like to be a Net Control Station for this net, please contact Jeff Garth WB2ZBN



### Online Conversion Calculators By DigiKey

<https://www.digikey.com/en/resources/online-conversion-calculators>



## Gloucester County Skywarn Net

The Gloucester County Skywarn Net is held every Sunday @ 1930 Hours on the 147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

All Are Welcome To Participate

Net Control Stations : Charlie Wahl KC2STO ; Steve Bromhead KB2RTZ; & Jeff Garth



## Gloucester County ARES Net

The Gloucester County ARES Net is held every Sunday @ 2000 Hours on the 147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

All are welcome to participate

Net Control Stations :

Steve Farney W2SEF; Bob Keogh KD2NEC; Karl Frank W2KBF; Al Arrison KB2AYU;  
Gary Mirkin WA3SVW; Greg Ciraula K3GC; & Todd Woodward KD2ESH

Steve Farney W2SEF : July 6, 2025  
Karl Frank W2KBF : July 13, 2025  
Al Arrison KB2AYU : July 20, 2025  
Gary Mirkin WA3SVW : July 27, 2025

Steve Farney W2SEF : August 3, 2025  
Todd Woodward KD2ESH : August 10, 2025  
Steve Farney W2SEF : August 17, 2025  
Greg Ciraula K3GC : August 24, 2025  
Bob Keogh KD2NEC : August 31, 2025

Anyone who is interested in joining the Gloucester County ARES Team, is invited to contact Bob Keogh at KD2NEC @ QSL.NET

Current Website Updates : Go to this page to find out the latest changes & updates on our W2MMD Website

<https://gloucestercountyarcs.weebly.com/current-website-updates.html>



## ARRL Learning Center

<https://learn.arrl.org>

Discover how to make Amateur Radio your own.

Online courses from the ARRL Learning Center provide ARRL members with additional instruction and training for getting on the air, emergency communications, and electronics and technology





## At The Repair Bench...

A monthly column describing a recent repair bench event.

By Chris Prioli AD2CS - [chris@ad2cs.com](mailto:chris@ad2cs.com) - [www.ad2cs.com](http://www.ad2cs.com)

### MFJ-259/269 Series - July 2025

This month's column is taking a slight departure from the norm. Instead of reporting on a failed piece of equipment, this article will discuss an *ongoing repetitive failure that was caused by the design of the equipment*. Now, that is not one-hundred-percent true, as the problem is much worse on some models or examples than it is on others. In fact, some users may never notice any problem with this issue, while others will be cursing MFJ every time they attempt to use the **MFJ-259 or MFJ-269 (Figure 1)** type of SWR analyzer.

Let's see just what this is all about. On my bench, I have an MFJ-259D as well as an MFJ-269D. Why would I have both of these instruments? Simple - the first instrument purchased does not cover the entire ham band set, but it was the best option at the time of purchase. The MFJ-259D has frequency coverage from 0.1 MHz (100 kHz) through 232 MHz, but has no coverage for UHF frequencies. The MFJ-269D, which was offered after I purchased the MFJ-259D, adds in the missing UHF coverage, in two ranges labeled as **"UHF LO"** and **"UHF HI"**. Furthermore, the MFJ-259D is marked as being an **"HF/VHF SWR ANALYZER"**, while the MFJ-269D is marked as being an **"HF/VHF/220MHz/UHF SWR ANALYZER"**.



These two instruments are remarkably similar in outward appearance and design features. However, there are some important differences not only between the instruments themselves but also in the fabric and plastic film protective carrying case/covers offered by MFJ for these instruments. Starting with the cover, the MFJ-259D cover has a nicely rounded and perfectly positioned hole in the front panel plastic film at the site of the push-button power switch. The placement of this hole is important in that it can interfere with the switch operation and even cause inadvertent switch activation if it is not properly positioned.

There are three shaft holes provided in the film at the locations of the three front panel rotary controls installed on the instrument, but there is no such hole in the film at the location of either the **GATE** or the **MODE** pushbutton switch. These two switches are momentary-type switches and are not easily activated inadvertently, so no holes are really needed for these switches.

Going back to the **POWER** pushbutton switch, this switch is a latching **"ON"** type of switch. In my example of the MFJ-259D, the pushbutton actuator is a low-profile cap that is just barely proud of the raised ring that surrounds its hole in the instrument front panel when the switch is **"OFF"**. When this switch is **"ON"**, the actuator cap is recessed below the plane of the surrounding ring. This arrangement makes it almost impossible to inadvertently switch this instrument's power switch **"ON"**, as a casual bump of almost any type would not depress the button below the surface of the surrounding ring.

At The Repair Bench - Continued on page 25

As a result of the power switch actuator design, I have never had an inadvertent power-on of the instrument, so I have never had an unexpected depletion of the battery pack in my MFJ-259D. The same cannot be said, of course, of my MFJ-269D.

Before going into the problems with the MFJ-269D, let's spend a minute or so discussing just *why* it is so annoying when the MFJ-269D battery pack is depleted. First of all is the plain and simple inconvenience of needing to change out the battery set in the middle of a job. Most folks just want to get on with the job, and do not want to be bothered with the tedious task of battery pack replacement.

Next is the hassle involved in getting to the battery pack. In order to service the battery pack on this unit, the instrument must first be removed from its protective carrying case/cover. This requires the use of a  $\frac{1}{16}$ " Allen wrench to loosen the grub screws (set screws) in the knobs. Once the knobs have been removed, it is necessary to work the case off the instrument, carefully lifting the plastic film off the control shafts that extend through the film. While not difficult to do, a momentary lapse of attention will result in a torn film as it snags on one of the shafts.

Once the protective carrying case/cover has been removed, we can remove the two sheet metal screws that secure the battery compartment cover to the instrument body, revealing the ten (10) "AA"-size cells within. That's right - *ten "AA" cells* make up the battery pack for this instrument. Repetitive battery failure on this unit gets to be an *expensive* proposition!

From the above, it is easily evident just why it is such a problem that this instrument goes through so many batteries, but... exactly *why* do the batteries need such frequent replacement? The answer is because of the design of the front panel power switch as well as the design of the protective carrying case/cover.

Starting again with the cover, it was disturbing to discover that no provision had been made in the plastic film for the power switch actuator pushbutton. This meant that I had to first install the cover and mark where to make a hole, then remove the cover and cut the required hole in its marked location. In addition, this model also has a latching pushbutton switch used to select either the "*UHF LO*" or the "*UHF HI*" frequency range when working with UHF frequencies. This switch too required the marking of a location and then the cutting of a hole at that location so as to be able to comfortably operate the switch (**Figure 2**).

Once again going back to the power switch, the switch actuator on this model differs from that on the MFJ-259D in that it is a physically longer actuator, meaning that it sits considerably further out from the ring that surrounds the switch opening on the instrument front panel. This additional length also means that in its "*ON*" position, the actuator cap is still proud of the surrounding ring. Thus, it is very easy to inadvertently bump this switch and turn it "*ON*" without the user being aware that it has happened.

I typically store my two MFJ SWR analyzers by hanging them by their carrying case straps from the same hook on the wall of my shop. This arrangement then has one of these instruments hanging in front of and in contact with the other, often resulting in the inadvertent activation of the power switch on the MFJ-269D.



The result is that almost every time I reach for it to use it, I find that the battery pack has been depleted and must be replaced before I can use the instrument.

Now we have arrived at the purpose of this article, and the nature of the “*repair*” that was made. In reality, this repair, actually a modification, was so simple that it is surprising to me that I had not thought of doing it sooner than I did.

I quickly realized that the MFJ switch design was poor and was the root cause of this problem. I set out to design a simple means of breaking the battery feed circuit between the battery pack and the power switch - something that could be easily installed, would not require major modification to the instrument, and would be easy to activate in order to kill the battery circuit whenever I wanted to do so. To be honest about it, I dragged my feet on this one, because I really did not want to start making holes *willy-nilly* in the enclosure. The protective carrying case/cover did not leave many alternatives as to location for a switch to be installed. Besides, what type of switch would I want to use? In reality, the simplest fix would have been to find a lower-profile switch actuator cap such as that used on the earlier models of this instrument. However, I think that I learned just why MFJ made the change - I could not find the low-profile actuator cap *anywhere!*

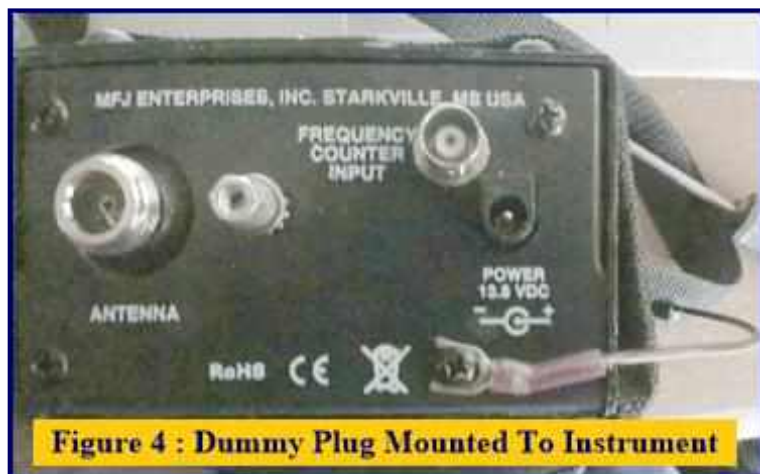
While I was perusing the MFJ-269D schematic one recent day, I realized that the DC power input jack used on the instrument is of the switching type as many of them are, but what is a bit different is that the switch was actually *used* in this circuit!

Quite often, the two terminals of the integrated switch in the DC power jack are simply tied together at the negative side of the supply. What was different here is that MFJ actually used the switch in the jack for the purpose of - wait for it - yes... disconnecting the battery pack when the wall wart power supply was connected to the instrument. Well, that is *exactly* what I wanted to do - to disconnect the battery pack. I realized that I could accomplish the task simply by inserting an appropriately-sized barrel connector dummy plug into the DC power jack!

I sourced a 5.5mm x 2.1mm power plug with a short twin-lead pigtail attached (**Figure 3**). I have several of them on hand, so that was no problem. I separated the two wires, and then I cut off the red wire right at the plug body - I only needed one wire for my purposes. I shortened the remaining black lead to about six inches, and then I crimped on a spade terminal with a heat-shrink tube covering. After shrinking the covering by applying hot air from my heat gun, I was ready to install the dummy plug.

I loosened one of the screws on the upper surface of the instrument, underneath the top flap of the carrying case. Then, I slid the spade lug under the screw head (**Figure 4**) and re-tightened the screw to secure the wired dummy plug to the instrument. Inserting the dummy plug barrel into the DC power jack (**Figure 5**) opens the battery circuit, making it impossible for the battery pack to become depleted inadvertently.

*At The Repair Bench - Continued on page 27*





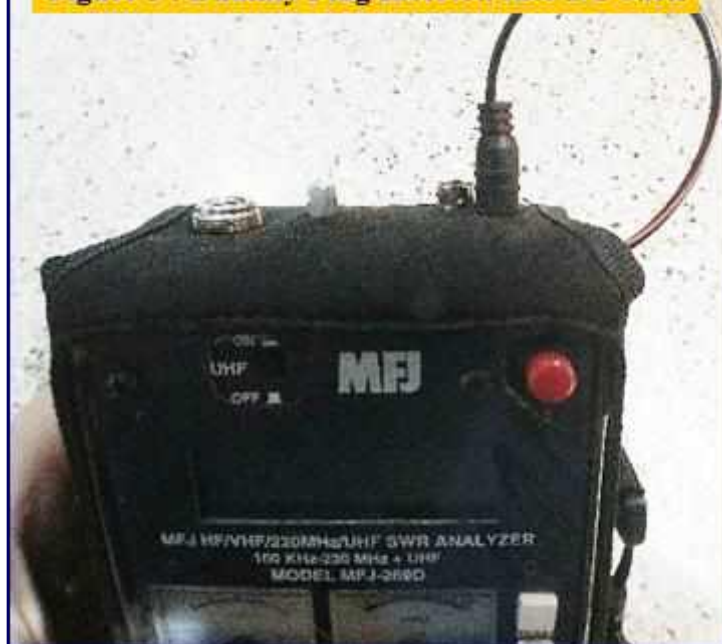
This is such a simple solution to a nagging headache of a problem that had been annoying me for a couple of years. Every now and then a manufacturer does something that has unforeseen drawbacks, and it is up to those of us in the field to develop a solution to the problem presented. Sometimes that solution is so easy that it is often overlooked while searching for something more involved and complex. We are then making it harder on ourselves - harder than it needs to be.

There is an old adage that says **KISS! - Keep It Simple, Stupid!**

It is good advice that was never any truer than it was here.

**See you next month!**

**Figure 5 : Dummy Plug Inserted Into DC Jack**



## Celebrating 90 Years of ARRL ARES®

As we celebrate 90 years of ARES, it is essential to reflect on its history, achievements, and the role it plays in emergency management. In 1935, ARES was established to organize amateur radio operators to provide communication support during emergencies. The initiative was born out of the need for reliable communication channels when traditional systems fail. Over the decades, ARES has evolved, adapting to new technologies and the changing landscape of emergency management. The first local emergency coordinators were appointed in 1937. They were Charles H. Taylor, W4B, in the Southeast; J. Robert St. Clair, W2B, in the Northeast; and Harry L. Miller, W5A, in the Southwest.

ARES has played a crucial role in numerous disaster responses, including hurricanes, floods, and wildfires. Amateur radio operators have provided essential communication links when other systems were down, ensuring that emergency services can coordinate effectively. Over the years, ARES has focused on training its members to be prepared for emergencies. This training includes regular nets, drills, participation in emergency preparedness exercises, and collaboration with local emergency management agencies. The training ensures that operators are ready to respond quickly and efficiently when called upon.

ARES has fostered strong relationships with local communities and emergency services. By participating in public service events and providing communication support for community activities, members have built trust and recognition as valuable resources in times of need. As technology has advanced, so has ARES, with the integration of digital modes, satellite communications, and other modern technologies that have enhanced the capabilities of amateur radio operators. This evolution allows ARES to provide even more reliable and efficient communication during emergencies. - QST NFL, ARRL Northern Florida Section newsletter (<https://arrrl-nfl.org/wp-content/uploads/2025/06/01-QST-NFL-June-2025.pdf>)

*Article Credit : The ARES® Letter for June 18, 2025 - [www.arrl.org](http://www.arrl.org)*



## Amateur Radio Emergency Services - July 2025

### Resources - News - Updates

By Bob Keogh KD2NEC - [kd2nec@qsl.net](mailto:kd2nec@qsl.net)  
Gloucester County Emergency Coordinator



For all of you girls and boys who want to run WinLink on a Linux platform, **Bob Murdock WX2NJ, Ocean County ARES® Emergency Coordinator**, has written a procedure to install VARA and Winlink on a Linux OS.

The PDF can be downloaded at : <http://bit.ly/4ekRDtQ>

## ARES Resources (Updated as of November 2024)

ARRL ARES Registration Form : <https://bit.ly/3Ae2pCf>

Download the ARES Manual [PDF] : <https://bit.ly/3iUhJLQ>

ARES Field Resources Manual [PDF] : <https://bit.ly/3QT4PtY>

ARES Standardized Training Plan Task Book July 2024 Ver. 3.0 [Fillable PDF] : <https://bit.ly/4dToEes>

ARES Standardized Training Plan Task Book July 2024 [Word] : <https://bit.ly/4heLXSU>

ARRL ARES Plan July 2024 : <https://bit.ly/3Uf8gyf>

ARES Group Registration : <http://bit.ly/3XodGpX>

ARRL Emergency Communications Training : <http://bit.ly/3J2gMMf>

FEMA 2023 National Preparedness Report : <https://bit.ly/3YrPWnY>

Southern New Jersey Section Emergency Operations Plan 2023.PDF : <https://bit.ly/3YqMdHb>

ARRL ARES Monthly Newsletters : <https://bit.ly/408OV5d>

The Amateur Radio Emergency Service® (ARES) consists of licensed amateurs who have voluntarily registered their qualifications and equipment, with their local ARES leadership, for communications duty in the public service when disaster strikes. Every licensed amateur, regardless of membership in ARRL or any other local or national organization is eligible to apply for membership in ARES. Training may be required or desired to participate fully in ARES. Please inquire at the local level for specific information. Because ARES is an amateur radio program, only licensed radio amateurs are eligible for membership. The possession of emergency-powered equipment is desirable but is not a requirement for membership.

If you are interested in learning more about the Gloucester County ARES Program or becoming an ARES member, please contact Bob Keogh (KD2NEC@QSL.NET)

## Never Too Soon To Think About Volunteering For The Bike MS!



**Bike MS : City To Shore Ride 2025**

**September 27 - 28, 2025**

**Bike MS : Bike To The Bay (Delaware) 2025**

**October 4, 2025**

**N3MSS Amateur Radio Communications**

**Bike MS Volunteers : [www.n3mss.org](http://www.n3mss.org)**

*n3mss.org website not yet updated for 2025*



## ARES Red Cross Trailer Update - May 30, 2025

By Karl Frank W2KBF

On Friday, May 30, 2025, **Bob Keogh KD2NEC**, **Todd Woodward KD2ESH**, and **Karl Frank W2KBF** continued to prepare the trailer for GOTA/Field Day. Operating tables had been installed previously and radios had been mounted to the shelf. For our latest test, we strapped a fiberglass mast to the trailer and set up a Chameleon wire antenna as an end-fed inverted VEE (low SWR on 80 - 10 meters), fired up the propane-powered generator and tested out the Yaesu FT-857 on 20 meters. A station in Florida gave us a S8 signal report with good, clean audio. So we now have demonstrated functioning electrical power and functioning HF and VHF/UHF radios (Yaesu FTM-400) working from the trailer. More work remains to be done on the 120 VAC wiring and tidying things up, but we have demonstrated that we have a basic functional EMCOMM setup.



### Operating Tips

If at the conclusion of a contest you find you didn't follow all of the rules, it's OK to still send your log in a checklog. Didn't realize the power limit was 100 W instead of 150 W? Submit your checklog. Your lockout didn't lock out the other stations in a multi-op? Submit your checklog. While it's by no means an exhaustive list, here are some examples of other things that would put your log into the checklog category :

- Not following the contest rules. Most contests also have a rule that says you must follow the rules of your license.
- Corrections to the log after the contest, based on information not received in the contest. For example, reading [www.3830scores.com](http://www.3830scores.com) reports and realizing you copied a call incorrectly and going back to the contest log and correcting it.

*Operating Tips - Continued on page 34*



## Club Member DMR IDs

Club Member	DMR ID
W2MMD Clubhouse	3198604
Michael Andrescavage N2ICV	3134044
Lance Appel KE2UC	3200487
Joshua Boylan KE2FSC	3216140
Alex Calabrese WA2ADS	3100583
Chuck Capasso WB2PGE	3169781
Matthew Carango N3QB	3169432
Todd Cecilio KA2YNT	3169458
Anthony Cerami N2OAC	3202759
Mark Clark N3QMJ	3102110
Norm Coltri K2NRC	3183851
Holden Correia-Fisher KD2JPV	3104911
Mike Covalski N2MMC	3134855
Walter Coward WX2E	3166863
Bob Demola KD2GFL	3134319
Doug Dersch KD2VQA	3193630
Thomas Distelcamp Sr KC2GYC	3110869
Glenn Dougherty N2YIO	3161836
Adam Duncan W3DUN	3202691
Herb Dyer KT2Y	3134907
Harry Elwell AD5TT	3128498
Misael Fernandez Jr KE2EBL	3214756
James Foster W3JNF	3142117
Karl Frank W2KBF	3146716
Glen Guenther KE2BUO	3202079
Melissa Guenther KE2BWZ	3202496
Deirdre Anne Hebert AD2GQ (AB1ST)	3133330
Gary Hewitt N2WHV	3134654
Chuck Lanard KD2EIB	3134298

Club Member	DMR ID
Darren Malone KD2ALQ	3215227
Gary Mirkin WA3SVW	3165494
John Murrow KD2NHK	1134122
John Newman WB4YLM	3213273
Phil Nunzio WA3RGY	3134336
John O'Connell K2QA	3110610
Robert Pantazes W2ARP	3157208
Sheldon Parker K2MEN	3214037
Jonathan Pearce WB2MNF	3163415
Michael Pecorini K2MRP	3132996
Michael Pentimall KC3VTF	3203601
John Price III KD2QYC	3123583
Chris Prioli AD2CS	3195449
Michael Resnick N2WOQ	3215856
Frank Romeo N3PUU	3134935
Len Rust III W2LJR	3186225
Len Rust IV K2LJR	3196243
Dave Sheppard W2PAX	3112666
Cory Sickles WA3UVV	1142052
James Simeone KC2AOF	3134848
Stan Slachetka WA2JRZ	3213904
Court Smith KD2SPJ	3186243
Jackson Snyder AI2D	3164371
Rich Subers W2RHS	3204316
Brett Waller K2BKW (KC2UXQ)	3134261
Matt Wilson K2MFW	3134607
Bill Wood KD2OSJ	3197459
Jim Wright N2GXJ	3215168
John Zaruba Jr K2ZA	3134331
<b>New Entries As Of 05/16/2025</b>	

For more information, DMR links, and W2LJR's DMR presentations, go to :  
<https://gloucestercountync.weebly.com/dmr.html>

## DMR Configuration Sequence

### 1. Obtain and Configure DMR ID :

- <https://www.radioid.net>

### 2. Download Contact List :

- <http://www.dmrcontacts.com>

### 3. Identify Repeater or Hotspot :

- <https://www.repeaterbook.com>

### 4. Define Talk Groups

- Numerical ID
- Text Name

<https://brandmeister.network/?page=talkgroups>

### 5. Create Channel

- Select Number
- Assign Name
- Select DMR ID
- Assign Frequency
  - ♦ Transmit
  - ♦ Receive
  - ♦ Bandwidth
  - ♦ Power
  - ♦ DMR Mode (Simplex/Repeater)
  - ♦ TX Permit (Channel Free)

- Assign Talk Group
- Assign Color Code
  - ♦ Agreed Upon with Other Users
- Assign Time Slot
- Agreed Upon with Other Users

### 6. Create Zone

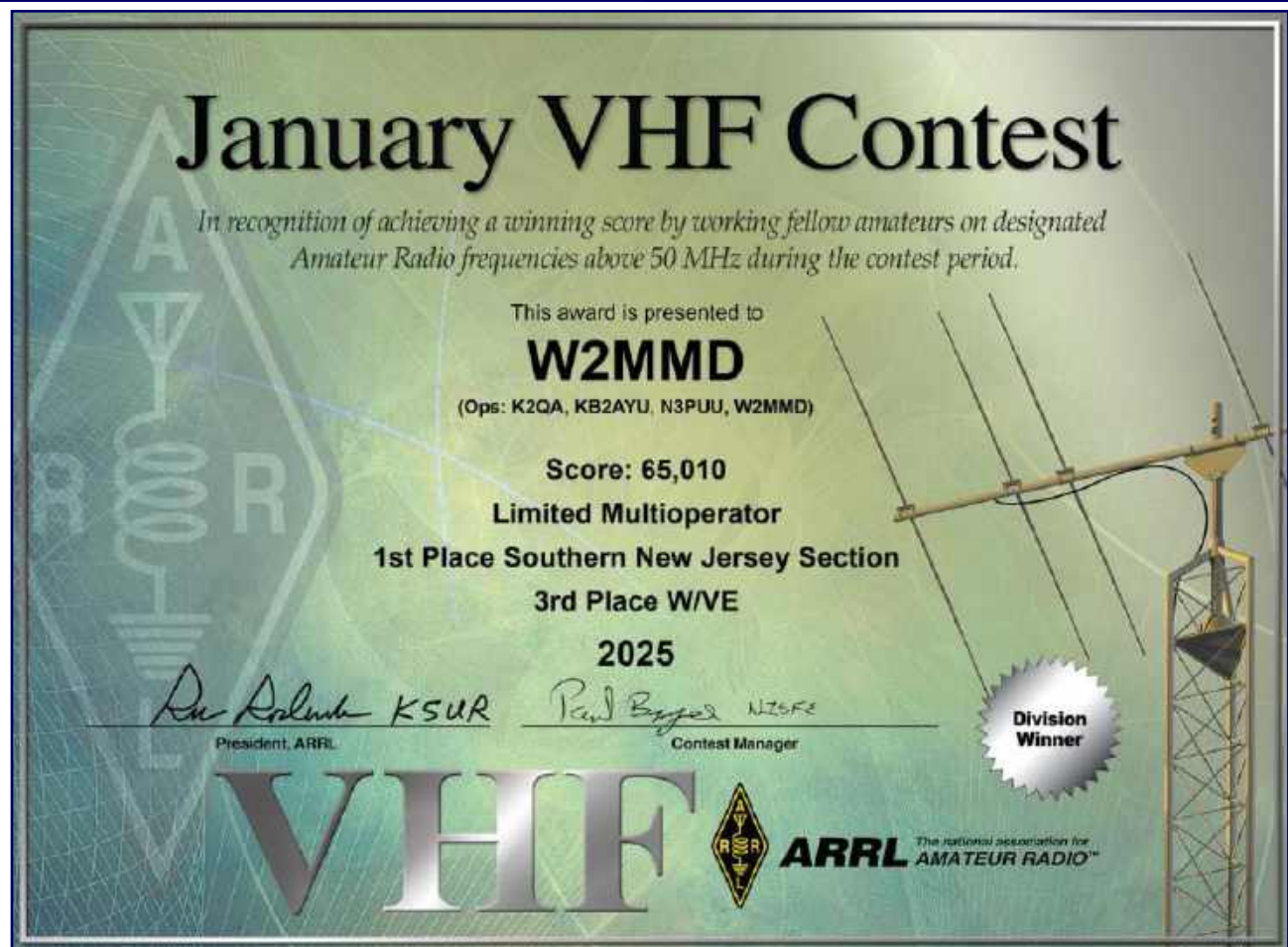
### 7. Add Channels to Zones

### 8. Configure Features

### 9. Upload Code Plug

### 10. Upload Contact List

If you recently changed your callsign, contact [idteam@dmr-marc.net](mailto:idteam@dmr-marc.net) to have your DMR ID transferred to your new callsign.



# My HF Antenna Install - Part One

By Mary Delemarre W2TDS

## Antenna Selection

It was difficult to decide on which HF antenna to purchase. I researched different types and considered what bands I wanted the antenna to cover. I finally chose the Hustler 5-BTV vertical antenna. Santa brought it for Christmas.

Next, I needed to figure out what other components I'd need - and request some help from the Club. I emailed the GCARC email reflector on March 30. **Al Arrison KB2AYU** and **Lee Hafele WA2LH** offered to help with the installation. Club members also provided many helpful suggestions. The Hustler installation manual on the DX Engineering website is excellent. Using it, I came up with a parts list and a set of installation steps. I reviewed everything with Al and Lee during our first work session and refined the list via texts and emails.

## Parts List

Items I bought after the Hustler 5 BTV antenna :

- **From DX Engineering :**
  - ◆ Tilt Base Antenna Mounting Systems - DXE-TB-3P
  - ◆ Saddle Clamps (3) - DXE-SSVC-2P
  - ◆ Coaxial RF Connector Adapters - DXE-363-SST
  - ◆ Ring Terminals - DXE-225RT-20
  - ◆ Direct Coax Feed Add-On Kits - DXE-AOK-DCF
  - ◆ Radial Plates - DXE-RADP-3
  - ◆ Bulk Radial Wire Kits - DXE-RADW-1000K
  - ◆ Radial Wire Biodegradable Anchor Pins - DXE-STPL-100BD
  - ◆ Ruggedized BTV Reinforced Lower Tube - DXE-RLT
  - ◆ PolyPhaser Coaxial Lightning Protectors - IS-50UX-C0
  - ◆ Radial Plate Wire Attachment Hardware Kit - DXE-RADP-1HWK
- **From Davis**
  - ◆ Bury-FLEX Coaxial Cable - 125 feet
- **From ACE Hardware**
  - ◆ Quikrete Fast Setting Concrete mix (3 x 50 lb bags)
- **From Home Depot**
  - ◆ 5/8" by 8' copper ground rods (2)
  - ◆ 5/8" in bronze ground rod clamp (2)

## Installation Steps

- Select the site
- Install pipe for mounting (we used Quikrete to secure it)
- Dig trench for coaxial cable
- Run high-quality coax from house to antenna base
- Install ground rod and PolyPhaser lightning protection
  - ◆ One ground rod is in place near coax entry; second near electric meter is pending
- Build and assemble antenna
- Install tilt and radial plates
- Lay out 30+ ground radials
- Tune the antenna

*W2TDS My HF Antenna Install - Continued on page 33*



Note : Some steps are still pending as of this writing.

### Install Day One - May 30, 2025

Lee, Al, and I reviewed the list of items I needed and finalized the installation steps. We selected the antenna site and planned the next phase.

**Homework :** Order additional items and choose the next install day.

### Install Day Two - June 4, 2025

- Dug hole for the mounting pole
- Set the metal pole in place with stones for drainage
- Mixed and poured Quikrete into the hole (thanks to Lee's wheelbarrow!)
- Lunch break
- Dug the trench for the coax cable - much harder than expected, but we got it done

### Homework :

- Contact utility company to map electric and cable lines (unable to drive ground rod near electric meter without that info)
- **Chris Prioli AD2CS** offered to help with radials; recommended getting more supplies
  - ♦ Additional **Radial Plate Hardware Kit (DXE-RADP-1HWK)**
  - ♦ Heat shrink tubing



## Install Day Three - June 24, 2025 (Canceled)

Originally scheduled for June 24, but postponed due to a predicted high temperature of 99°F. New date TBD.

### What's Next

Day Three will likely be rescheduled for late August when the weather cools down.

#### To-do list :

- Install second ground rod near the electric meter
- Attach and lay out remaining radials
- Install PolyPhaser lightning protector
- Final antenna tuning and on-air testing
- Finish designing and printing QSL cards
- Celebrate with first QSOs!

If you'd like to help with the antenna install, please let me know!



### Operating Tips *(Continued from page 29)*

- Using a combination of remote and local receiving and transmitting gear when the rules state, "All transmitters, receivers, and amplifiers must be within a single 500-meter diameter circle."
- Submitting a log claiming operation from one state/country/continent, while the station is really in another.
- In an ARRL contest, phoning someone in that last rare Section you need and having them contact you.
- Recording the entire ARRL Sweepstakes contest audio, then listening to it after the contest and correcting entry errors.
- Asking someone to spot you during CQ WW contests.

# Refocusing Amateur Emergency Communications With New Technologies

By Jon Pearce WB2MNF

Amateur radio's role in emergency communications has been challenged by modern technologies like cell phones and Starlink, reducing the need for traditional HT-based updates in many scenarios. However, significant local emergencies - such as the Asheville incident, where road closures isolated communities, or Hurricane Katrina, where shelters required coordinated communication - demonstrate its continued relevance. To enhance our impact, three innovative technologies stand out : Single Frequency DMR Repeater (SFR), BTECH UV-PRO, and Meshtastic unlicensed 920 MHz radios. These tools, requiring new but affordable radios, offer distributed operation and are well-suited for early response or shelter-based communication. Their capabilities, use cases, and implementation considerations, emphasizing the need for ARES training and coordination are described below.

## Target Scenarios and Limitations

These technologies are designed for significant local emergencies where infrastructure fails, such as :

- **Early Response :** Situations like Asheville, where blocked roads and no phone service left residents isolated, requiring rapid communication links.
- **Shelter Operations :** Scenarios like Katrina's Superdome or distributed shelters, needing communication between locations for logistics or medical updates.

In smaller incidents, emergency responders are unlikely to need or want assistance from generally-untrained hams, as their resources are sufficient. Effective use of these technologies demands ARES members acquire the equipment, undergo training, and develop use cases tailored to local needs. Most systems are distributed, allowing independent operation, but coordination ensures reliability. Each technology - SFR, BTECH UV-PRO, and Meshtastic - can be implemented separately, offering flexibility based on available resources and training.

## Technologies for Emergency Communications

### 1. Single Frequency DMR Repeater (SFR)

- **Overview :** SFR leverages DMR's two 30-millisecond timeslots to create a portable repeater on a single frequency. A compatible mobile radio, such as the verified Anytone AT-D578UV (approximately \$400), can be installed in a car or dedicated emergency vehicle, powered by the vehicle itself and independent of commercial power sources that may fail during an emergency. Unlike traditional analog repeaters, typically located at remote sites and reliant on commercial power, SFR can be set up ad-hoc by a ham at a strategic location, like a hill near a disaster site, ensuring functionality through on-site testing. Other compatible radios are available from Retevis, Hytera, and other manufacturers.
- **Why It's Valuable :** This mobility and independence provide a reliable alternative to traditional repeaters, which may become inaccessible or unusable during outages or physical barriers. DMR's channelized calling using talkgroups on a single frequency minimizes the need for all users to hear unrelated conversations, enhancing efficiency.

#### Key Features :

- ◇ **Rapid Deployment :** A ham can position the vehicle, verify operation, and establish communication without external power.
- ◇ **Affordability :** The Anytone AT-D578UV costs around \$400, with other options from Retevis, Hytera, and others at similar or lower prices, far less than HF rigs (\$1,000+).

*Refocusing Amateur Emergency Communications - Continued on page 36*



- ◇ **Pre-Configuration** : Codeplugs for SFR use can be preconfigured and distributed, reducing the need for users to understand complex DMR operation. ARES members would not need detailed DMR training, as a preconfigured radio can be handed to an otherwise-untrained ham for immediate use.
- ◇ **Transparent Integration** : Adding the SFR integrates seamlessly into the second timeslot (TS2), requiring no user adjustment beyond initial setup.
- **Use Case** : Establishing a temporary network for first responders or coordinating shelter logistics in a disaster area, such as Asheville's isolated communities, where an SFR could link hams to emergency services.
- **Training and Testing** : ARES leaders need training to create a codeplug with the required frequency and parameters, and to demonstrate using talkgroups and direct calling set up by administrators. Testing involves setting up the SFR in a vehicle (e.g., a Red Cross trailer) at emergency-type locations, assessing coverage and signal reliability. Beyond this, SFR communication is straightforward, as simple as analog simplex.

## **2. BTECH UV-PRO**

- **Overview** : The BTECH UV-PRO, a \$170 handheld transceiver, has two major attractive features: Bluetooth connectivity for programming via a cell phone app and a built-in KISS TNC for Winlink messaging (winlink.org). It's particularly useful for hams operating away from their primary area, where local repeater or simplex frequencies are unlikely to be pre-programmed into their radios.
- **Why It's Valuable** : The app-based programming allows rapid programming of frequencies, CTCSS tones and other channel specifications in disaster zones away from the user's home location, a critical advantage in scenarios like post-Katrina shelters. In Winlink operation, unlike many low-priced analog radios like the Baofeng UV-5R, which struggle to interface reliably with audio devices like the DigiRig for Winlink due to poor audio compatibility, the UV-PRO avoids this issue with its Bluetooth connection. Programming and use rely solely on Bluetooth, not the cellular network, reducing setup time compared to traditional PC-based Winlink setups requiring an HT (\$50-\$100), sound interface (\$50-\$100), and computer (\$300+), totaling \$400-\$500 with complex configuration, and they're far more portable than a PC-based Winlink station. A BTECH-configured Winlink station could easily be carried through a shelter, passing messages from people with their needing to congregate near a central Winlink station.
- **Key Features** :
  - ◇ **Bluetooth Programming** : Users can add new frequencies and PL tones in seconds via the app, avoiding the slow, error-prone manual process, ideal for dynamic emergency settings.
  - ◇ **Winlink Messaging** : The KISS TNC enables sending messages through phone apps without additional hardware, allowing data collection (e.g., medical needs, supply requests) and transmission from shelters or neighborhoods.
  - ◇ **Cost** : At \$170, it's a significant saving over the \$400-\$500 PC-based Winlink setup.
- **Use Case** : Mobile data collection in shelters or isolated neighborhoods during disasters like Katrina, where hams could gather and send critical information to emergency services.
- **Training and Testing** : Members need training on app usage and Winlink protocols. Drills can simulate collecting and sending data from shelters, focusing on rapid programming and messaging efficiency.

- **Considerations :** Its distributed nature supports independent operation, perfect for scattered hams.

### 3. Meshtastic Unlicensed (920 MHz) Radios

- **Overview :** Meshtastic radios, costing \$30-\$50, form a mesh network on the unlicensed 920 MHz band (meshtastic.org). GCARC previously tried licensed 433 MHz Meshtastic radios, but the small number of hams involved failed to build a network of critical mass. Switching to unlicensed 920 MHz nodes leverages a large user base of non-hams, significantly increasing station numbers and enabling encrypted communications for sensitive data like personal health information or emergency coordinates.
- **Why It's Valuable :** The network's critical mass - our Clubhouse node detects over 100 stations from South Jersey and Philadelphia - ensures reliable urban coverage. Hams and others in emergency communications roles could utilize this network even though most users aren't involved in the communication process. Unlicensed users are numerous but often lack radio knowledge, shifting the ham role from primary responders to infrastructure designers. Hams can configure radios and optimize bandwidth, enhancing emergency communication by supporting these users.
- **Key Features :**
  - ◇ **Encrypted Messaging :** Supports secure transmission of sensitive data, compliant with privacy standards.
  - ◇ **Low Cost :** Radios and nodes are affordable, encouraging widespread adoption.
  - ◇ **Critical Mass :** The unlicensed band taps into a large user base, unlike our limited 433 MHz trials.
- **Use Case :** Coordinating logistics across multiple shelters or providing backup communication in urban outages, as seen in Katrina's distributed shelter operations.
- **Training and Testing :** ARES leaders must develop communication protocols, adapting radiogram formats for Meshtastic messaging. Drills should test urban network stability, node placement, and bandwidth optimization strategies.
- **Considerations :** Hams focus on infrastructure design and configuration for unlicensed users, not frontline operation.

### Conclusion

By adopting SFR, BTECH UV-PRO, and Meshtastic 920 MHz radios, amateur radio can enhance its role in local emergencies. SFR's vehicle-powered, ad-hoc setup, manageable with a preconfigured radio, contrasts with vulnerable traditional repeaters. The BTECH UV-PRO simplifies mobile Winlink use with Bluetooth, offering a cost-effective alternative to complex PC setups, ideal for unfamiliar areas. Meshtastic leverages unlicensed networks for encrypted messaging, with hams optimizing infrastructure. Each can be implemented independently, supported by ARES training, to address early response and shelter needs effectively, redefining our emergency role.



*Club Merchandise from the K2ZA Workshop*  
Contact John Zaruba Jr K2ZA at [k2za@icloud.com](mailto:k2za@icloud.com)  
Go To : <https://gloucestercountvarc.weebly.com/club-merchandise.html>



## 2024-2028 Element 4 Amateur Extra Class License Question Quiz

This month we continue with Subelement E3 Radio Wave Propagation (3 exam questions - 3 groups).  
(Answers on Last Page)

### E3B01

**Where is transequatorial propagation (TEP) most likely to occur?**

- A. Between points separated by 2,000 miles to 3,000 miles over a path perpendicular to the geomagnetic equator
- B. Between points located 1,500 miles to 2,000 miles apart on the geomagnetic equator
- C. Between points located at each other's antipode
- D. Through the region where the terminator crosses the geographic equator

### E3B02

**What is the approximate maximum range for signals using transequatorial propagation?**

- A. 1,000 miles
- B. 2,500 miles
- C. 5,000 miles
- D. 7,500 miles

### E3B03

**At what time of day is transequatorial propagation most likely to occur?**

- A. Morning
- B. Noon
- C. Afternoon or early evening
- D. Late at night

### E3B04

**What are "extraordinary" and "ordinary" waves?**

- A. Extraordinary waves exhibit rare long-skip propagation, compared to ordinary waves, which travel shorter distances
- B. Independently propagating, elliptically polarized waves created in the ionosphere
- C. Long-path and short-path waves
- D. Refracted rays and reflected waves

### E3B05

**Which of the following paths is most likely to support long-distance propagation on 160 meters?**

- A. A path entirely in sunlight
- B. Paths at high latitudes
- C. A direct north-south path
- D. A path entirely in darkness

### E3B06

**On which of the following amateur bands is long-path propagation most frequent?**

- A. 160 meters and 80 meters
- B. 40 meters and 20 meters
- C. 10 meters and 6 meters
- D. 6 meters and 2 meters

*Element 4 Amateur Extra Class Quiz - Continued on page 39*



**E3B07**

**What effect does lowering a signal's transmitted elevation angle have on ionospheric HF skip propagation?**

- A. Faraday rotation becomes stronger
- B. The MUF decreases
- C. The distance covered by each hop increases
- D. The critical frequency increases

**E3B08**

**How does the maximum range of ground-wave propagation change when the signal frequency is increased?**

- A. It stays the same
- B. It increases
- C. It decreases
- D. It peaks at roughly 8 MHz

**E3B09**

**At what time of year is sporadic-E propagation most likely to occur?**

- A. Around the solstices, especially the summer solstice
- B. Around the solstices, especially the winter solstice
- C. Around the equinoxes, especially the spring equinox
- D. Around the equinoxes, especially the fall equinox

**E3B10**

**What is the effect of chordal-hop propagation?**

- A. The signal experiences less loss compared to multi-hop propagation, which uses Earth as a reflector
- B. The MUF for chordal-hop propagation is much lower than for normal skip propagation
- C. Atmospheric noise is reduced in the direction of chordal-hop propagation
- D. Signals travel faster along ionospheric chords

**E3B11**

**At what time of day is sporadic-E propagation most likely to occur?**

- A. Between midnight and sunrise
- B. Between sunset and midnight
- C. Between sunset and sunrise
- D. Between sunrise and sunset

**E3B12**

**What is chordal-hop propagation?**

- A. Propagation away from the great circle bearing between stations
- B. Successive ionospheric refractions without an intermediate reflection from the ground
- C. Propagation across the geomagnetic equator
- D. Signals reflected back toward the transmitting station

**E3B13**

**What type of polarization is supported by ground-wave propagation?**

- A. Vertical
- B. Horizontal
- C. Circular
- D. Elliptical



## Regional Skywarn Websites For On-Line And In-Person Training Classes

Philadelphia/Mt Holly Skywarn : [www.weather.gov/phi/skywarn](http://www.weather.gov/phi/skywarn)

State College, PA Skywarn : [www.weather.gov/ctp/skywarn](http://www.weather.gov/ctp/skywarn)

Pittsburgh, PA Skywarn : [www.weather.gov/pbz/skywarn](http://www.weather.gov/pbz/skywarn)

## Weather Information Nets & Frequencies

Hurricane Watch Net : [www.hwn.org](http://www.hwn.org)

- Day Time : 14.325 MHz
- Night Time : 7.268 MHz
- Information : 14.300 MHz

Local SKYWARN Frequencies :

- Atlantic County : K2BR, 146.745 MHz (-) 146.2 Hz  
◊ Net Every Monday @ 1900 Hours
- Camden County : K2EOC, 146.895 MHz (-) 91.5 Hz  
◊ Net Every Thursday @ 2030 Hours
- Cumberland County : KE2CK, 146.805 MHz, (-) 118.8 Hz  
◊ Net Every Monday @ 1930 Hours
- Gloucester County : W2MMD, 147.180 MHz (+) 131.8 Hz  
◊ Net Every Sunday @ 1930 Hours
- Salem County : N2KEJ, 146.625 MHz (-) 131.8 Hz

### What is a Skywarn Spotter?

By Jonathan Guseman KJ4ZWS, Warning Coordination Meteorologist  
National Weather Service Central PA - <https://www.weather.gov/skywarn>

Spotters are our eyes/ears in the field! The NWS depends on our spotters to give us ground truth, therefore assisting in warning issuance and being heavily involved in reporting and documentation. As we issue warnings from inside of our offices, we greatly appreciate our spotters assisting us in the field and describing to us what is happening.



## Comet MetEd Weather Education and Training - Free

MetEd, short for MetEd UCAR, is a website ([https://www.meted.ucar.edu/education\\_training](https://www.meted.ucar.edu/education_training)) and online learning platform provided by the COMET Program, which is part of the University Corporation for Atmospheric Research (UCAR). It offers a vast collection of free educational and training resources for the weather and geoscience community. These resources are used by students, educators, weather enthusiasts, and professionals alike to learn about meteorology, weather forecasting, and related topics.

**Here's a more detailed breakdown :**

### **COMET Program :**

MetEd is the signature offering of the COMET Program, which focuses on developing and delivering educational materials related to the geosciences.



### **Free Resources:**

The platform provides access to hundreds of training modules and resources, all available at no cost.

### **Target Audience :**

**MetEd's resources cater to a diverse audience, including :**

- Students studying atmospheric science and related fields.
- Educators looking for materials to enhance their teaching.
- Operational forecasters needing continuing education.
- Emergency managers and other professionals who rely on weather information.

### **Content Areas :**

**MetEd covers a wide range of topics, including :**

- Satellite meteorology.
- Aviation weather.
- Convective weather.
- Hydrology.
- Climate.
- Numerical modeling.
- Emergency management.

### **Interactive and Engaging :**

MetEd incorporates various learning formats, including interactive lessons, simulations, and videos, to enhance the learning experience.

### **Accessibility :**

MetEd materials are available online, allowing users to learn at their own pace and convenience.

### **Support :**

The COMET Program is supported by various organizations, including NOAA and UCAR.

**To register, go to :** <https://learn.meted.ucar.edu/#/signup-form>

**YouTube :** [https://www.youtube.com/@UCAR\\_COMETMetEd](https://www.youtube.com/@UCAR_COMETMetEd)

**Facebook :** <https://www.facebook.com/cometprogram>





## Volunteer Monitor Program Report - April 2025

The Volunteer Monitor (VM) Program is a joint initiative between ARRL and the FCC to enhance compliance in the Amateur Radio Service. This is the April 2025 activity report of the VM Program.

- A traffic and awards net operating on 7.185 MHz was issued an advisory for deliberately starting the net on top of the Andaman Island DXpedition, VU4AX.
- A case involving an Alabama station continuously calling another station on 20-meter FT8 was resolved informally and the robotic one-way transmissions stopped.
- Technician operators in Texas and Michigan were issued advisories for operating FT8 on 40 meters. Technicians have only CW privileges on that band.
- A Technician operator in Florida was issued an advisory for FT8 operation on 15 meters. Technicians have only CW privileges on that band.
- A Technician operator in Iowa was issued an advisory for FT8 operation on 20 meters, a band on which Technicians have no privileges.
- A commendation was issued to a station in Colorado for exemplary net control operation on 14.295 MHz on February 16, 2025, from 1600 - 1800 UTC, in which he demonstrated exceptional courtesy and efficiency in checking in stations under crowded band conditions.
- A commendation was issued to an operator in North Carolina for exceptional CW QRP operation on 7.025 MHz from 0100 - 0120 UTC on April 5, 2025. The operator demonstrated exceptional courtesy and efficiency in making contacts with numerous operators under crowded band conditions.
- A question-and-answer session was presented in person to the Mt. Airy VHF Radio Club in Mt. Airy, Pennsylvania. A virtual VM program was presented to the Bella Vista Amateur Radio Club in Rogers, Arkansas.

The totals for March 2025 monitoring were 1,480 hours on HF frequencies, and 1,849 hours on VHF frequencies and above, for a total of 3,329 hours.

*Thanks to Volunteer Monitor Program Administrator Riley Hollingsworth, K4ZDH*



**SteppIR Communication Systems** will cease production of consumer antennas and accessories on August 31, 2025. The company will accept and fulfill all consumer antenna and spare parts orders placed by August 31. There will not be any changes in terms of warranty service or technical support inquiries. A notice on the company's Facebook page states the change was made due to several emerging factors and is not taken lightly, but is necessary for ongoing operations. The first SteppIR antennas for amateur radio were demonstrated at the 2001 Dayton Hamvention®.

*Article Credit : The ARRL Letter for June 5, 2025 - [www.arrl.org](http://www.arrl.org)*



**CQ WW WPX Contest, CW 2025**  
**May 24, 2025**

**Call : T03E**  
**Operator (s) : AB2E**  
**Station : T03E**

**Class : SOAB HP**  
**QTH : FM5**  
**Operating Time (hrs) : 35**  
**Location : Other North America**

### Summary :

Band QSOs

80 : 13  
40 : 849  
20 : 797  
15 : 867  
10 : 336

**Total : 2,862      Prefixes : 1,037**

**Total Score : 10,042,308**

036

# ARRL Digital Contest 2025

## June 7, 2025

**Call : AB2E**  
**Operator (s) : AB2E**  
**Station : AB2E**

**Class : SO1R-8 LP**  
**QTH : SNJ**  
**Operating Time (hrs) : 5**  
**Location : USA**

### Summary :

Band QSOs

20 : 89  
15 : 3

**Total : 89**

**Total Score : 861**

039

**Comments :**

Probably the most boring contest of the year. Lamé point structure with zero mults. At least glad to see lots of activity on shorter FT4.

73 Darrell AB2E

Callsign : AB2E

Contest : ARRLIDC

Band	Mode	QSOs	Pts	Mul	Pt/Q
14	FT4	86	827	0	9.6
21	FT4	3	34	0	11.3
Total	Both	89	861	0	9.7
Score : 861		1 Mult = 1.0 Q's			

**CQ WW WPX Contest, CW 2025**  
**May 24, 2025**

**Call : K3TS**  
**Operator (s) : K3TS**  
**Station : K3TS**

**Class : SOAB HP**  
**QTH : WPA**  
**Operating Time (hrs) :**  
**Location : USA**

### Summary :

Band QSOs

40 : 60  
20 : 40

**Total : 100      Prefixes : 99**

**Total Score : 40,491**

037

**Comments :**

Only had a couple of hours available on Friday night, due to family visiting from out of town on Saturday and Sunday, so a very small effort was all I could make.

**CQ WW WPX Contest, CW 2025**  
**May 24, 2025**

**Call : NE2R**  
**Operator (s) : NE2R**  
**Station : NE2R**

**Class : SOAB LP**  
**Class Overlay : Classic**  
**QTH : SNJ**  
**Operating Time (hrs) : 6:00**  
**Location : USA**

### Summary :

## Band QSOs

40 : 54  
20 : 138  
15 : 42  
10 : 2

**Total : 236      Prefixes : 139**

**Total Score : 110,589**

038

## QRP Labs QCX+ 20 Meter CW Transceiver Build - Part 2

By Chris Prioli AD2CS - [chris@ad2cs.com](mailto:chris@ad2cs.com) - [www.ad2cs.com](http://www.ad2cs.com)

With the front end-plate installed to the board, the knobs can be installed onto the audio gain potentiometer and the rotary encoder (**Figure 9**). Then, simply plug the front panel board onto the pin headers along the front edge of the main PCB, and then slide the whole board assembly into the provided groove in one of the clamshell halves. Secure the board assembly with two of the 3mm x 6mm black flat-head machine screws provided.



Install the rear end-plate to the rear end of the lower clamshell half again using two of the 3mm x 6mm screws, being sure to first remove the nut from the BNC connector, but leaving the lock washer in place on the connector boss. After the end-plate is secured to the lower enclosure half, install the nut back onto the BNC connector, and then install the provided 3mm Phillips round-head machine screw through the hole provided in the rear end-plate and through the tab on the LM7805 5VDC voltage regulator, securing the tab to the rear end-plate with the 3mm hex nut provided (**Figure 10**). This provides heat-sinking for the voltage regulator IC. Apply the four self-adhesive rubber feet provided to the underside of the lower enclosure half.



At this point, the radio is ready for alignment and testing. As expected, always use a dummy load when testing and aligning the radio. Connect the radio to a 12VDC supply using a 5.5mm x 2.1mm barrel connector with a center positive wiring scheme. A supply source of 12VDC is adequate for the alignment process. The alignment procedure is fully explained in the assembly manual, and is actually a quite simple procedure, though some of the adjustments can be somewhat touchy. Once the alignment is completed, simply install the upper enclosure half, securing it with the remaining 3mm x 6mm flat-head machine screws. The build is complete.

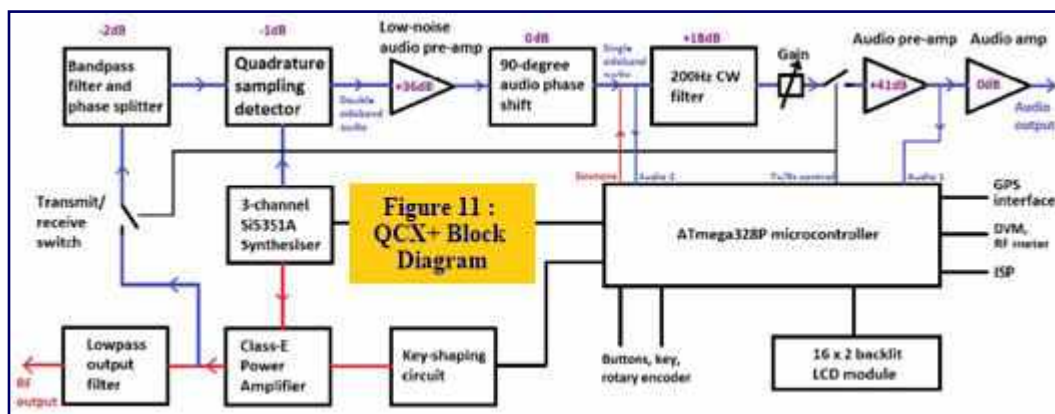
The QCX+ will operate from a wide range of voltages, but 13.8VDC is the recommended maximum. Excessive supply voltage will result in overheating of the PA transistors, as it will cause increased output power to be generated within the radio.

On first power-up, the unit should prompt the user to select the band for which the unit was built. However, I did not receive that prompt, with the radio automatically locking in on the 160-meter band. In order to correct this problem and to be able to properly align the radio, it was necessary to do a **“Factory Reset”** of the radio. This is done quite easily by launching the menu, done by pressing the Menu button for a long press. Once the menu has opened, navigate to **Menu 7**, then to **Menu 7.11 - Factory Reset**. Select that menu item, and then use the rotary encoder to display **“17”** on the LCD panel. Press the select button to start the reset. All user settings will be deleted.

*QRP Labs QCX+20 Meter CW Transceiver Build - Continued on page 45*



QRP Labs publishes a second manual besides the basic Assembly and Operation manual, available at <https://qrp-labs.com/images/qcxp/firmware/1.08/OpMan108.pdf>. While this manual is not specifically written to the current firmware in my radio, it is nonetheless quite useful. The current firmware is v1.09a, with the biggest difference apart from bug fixes being support for the 160-meter band. This makes the v1.08 manual quite applicable, and on its first page it is referenced for the v1.09 firmware as well as for the v1.08 release. One of the handiest features of this manual is the Menu Cheat Sheet found at the back of the manual, as mentioned earlier.



I also got some mileage out of the radio's **block diagram (Figure 11)** as provided in the *Assembly and Operation Manual*. The diagram was well drawn with the only obvious shortcoming being that one must intuit the location and connection into the system of the transmit & receive antenna. Now, any reasonably knowledgeable ham will understand exactly where the antenna must reside, but it would have been nice to include at least its connection point to aid the less experienced or knowledgeable among us. The block diagram makes it clear exactly what the signal path is like on both the transmit and receive chains through the radio, which is, after all, the intent of such a diagram. My compliments are due to the fact that the diagram makes the entire frequency synthesis operation more easily understood.

Several optional accessories are offered for the QCX+, including a development board (**Figure 12**), a GPS module, a TCXO, and an AGC control. I had ordered all of these except the AGC, which I went back and ordered after the fact. Due to the simplicity of the QCX+ design, it is an easy task to install the AGC after the fact, and then to make it active via the menu.



If installing the **TCXO accessory (Figure 13)**, one crystal and one capacitor are omitted from the standard build sequence, as their replacements are on the tiny TCXO PCB. This PCB has a cutout to fit around IC1, the SMT Si5351 integrated circuit. The TCXO is connected to the main PCB via three bare wire leads that feed through aligned holes in the two boards, and it sits down directly on top of the main PCB. When the TCXO is in use, it is necessary to go into the radio menu system and set the reference frequency to 25.000MHz instead of the default 27.004MHz, as the frequency of the TCXO differs from the standard reference frequency.



The only factually weak point in the documentation, if there is one, is in the schematic diagram. First off, the main PCB schematic and the front panel schematic are drawn as two separate diagrams. However, while some component ID's are a continuation from the main PCB number sequences, others are not. This results in the existence of, for example, an R1 on both the main PCB and on the front panel PCB. Further, the schematic fails to identify certain component values, with a case in point here being the audio gain potentiometer, R1 on the front panel PCB.

There is sufficient height in the enclosure to install the development board with accessory circuits and still close the enclosure. The development board is connected to the main PCB via a set of pin headers and pin sockets, making it in essence a stack-on shield. Note that in the illustration of the **development board at Figure 12**, red lines indicate which holes in the board are connected to which other holes. One of the things that I added via the development board is an audio amplifier and an internal speaker, which through the pin header connections associated with each of the TRS jacks on the main PCB, was a seamless add-on. I designed a simple amplifier circuit using the LM386 audio amplifier IC and a handful of external components, all of which were installed to a small area of the development board, as shown in **Figure 14**. Note the two-pin header for the speaker connection near the amplifier IC.

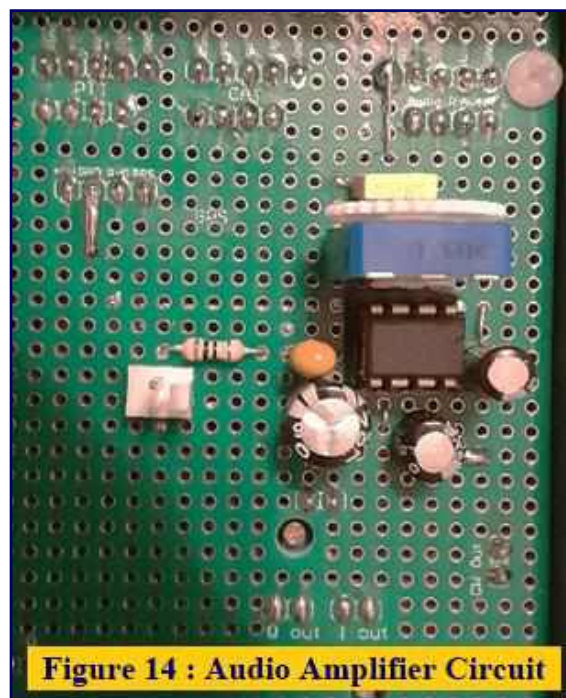
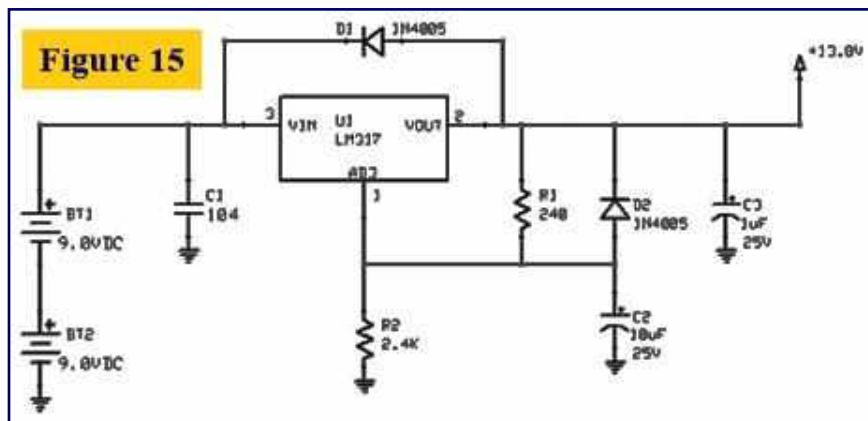


Figure 14 : Audio Amplifier Circuit

I plan to add a battery system to the development board next for full portability of the radio. I will most likely install a pair of nine-volt snap-top batteries in series with an adjustable voltage regulator fixed to output 13.8VDC for the radio power feed. This will involve the use of an LM317 voltage regulator IC and some additional external parts, including capacitors for current purity and precision resistors to fix and hold the output at the desired level.



Let's take a quick look at that concept. Refer to **Figure 15** for the location of the two resistors. The arithmetic provided by the manufacturer in the LM317 datasheet and used to calculate the required resistances for the LM317 looks like this, using a 1.25V reference voltage :

$$V_{OUT} = V_{REF} \times (1 + R_2/R_1)$$

or

$$V_{OUT} = 1.25 \times (1 + R_2/R_1)$$

Substituting our design goal of 13.8V into the equation, we get this :

$$13.8 = 1.25 \times (1 + R_2/R_1)$$

Re-arranging to get rid of the multiplication on the right side, we get this :

$$13.8/1.25 = (1 + R_2/R_1)$$

$$11.04 = 1 + R_2/R_1$$



Subtracting “1” from each side of the equation gives us the following :

$$10.04 = R_2/R_1$$

Let’s round it down to an even “10” and insert the factory suggested value of 240 ohms for R1 :

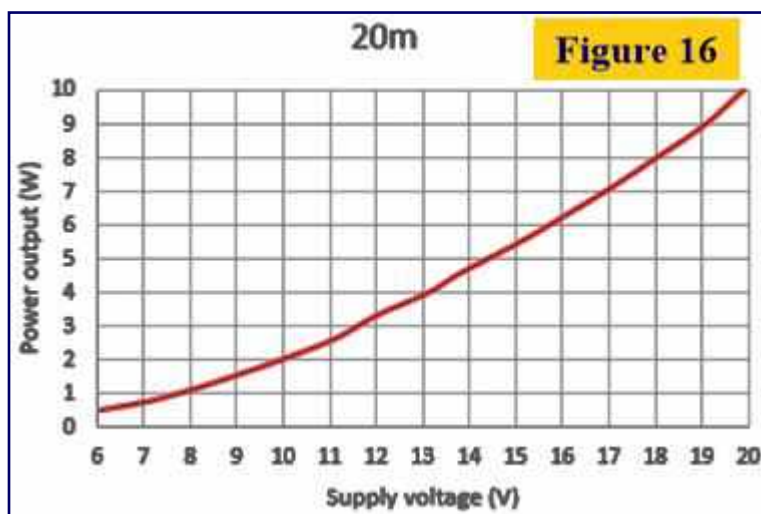
$$10.00 = R_2/240$$

Multiplying both sides of the equation by 240, we get the following :

$$10.00 \times 240 = R_2 \dots$$

...which means that  $R_2$  is equal to 2400 ohms. All of this, when applied to the design of the voltage regulator circuit, will give us the schematic shown at **Figure 15**.

All in all, this was an interesting and enjoyable build. The radio works as advertised, with about a 5.3W maximum power output when supplied with 13.8VDC, slightly higher than the output of the sample radio used for the illustrations in the assembly manual. That graph (**Figure 16**) shows a power output of about 4.8W at 13.8VDC supply voltage. Current draw is about 125mA on RX and about 310mA on TX. The factory recommendation is not to operate at power levels in excess of 5W because excess heat and stress to the PA transistors will result when that power level is exceeded. I am OK with being 0.3W over that limit. Infrared thermal measurements of the PA transistors, of course with the enclosure open, came in at about 85°C across the securing steel washer during extended CW transmit operation into a 50Ω dummy load.



Actual operating temperatures will be slightly higher due to the closing of the enclosure and also due to the placement of the development board above the main board. Key clicks are negligible, and key-down envelope rise times are on the order of just under 6mS as viewed and measured on my Siglent CML1102+ DSO.

I find the QRP Labs documentation to be fairly complete and mostly easily understood. I found the assembly instructions, as stated earlier, to be especially well-organized and professionally written. However, there are some shortcomings, and at least one big “plus”. The basic Assembly and Operation manual includes an extensive voltage reference table, providing the voltages expected to be measurable at various points in the radio. That is the “plus”. One of the major shortcomings is the fact that, despite a statement to the contrary, CAT information other than the CAT connector pinout data is not included in the manual. In fact, the user must look in the separate Operation Manual linked earlier to find the CAT reference details. In addition, there is a fairly comprehensive QCX troubleshooting guide available online at <https://www.qrp-labs.com/qcx/qcxtrouble>. That page has a link to a downloadable .PDF version of the web document. This guide was written to the earlier QCX design level and not specifically to the QCX+, but most of the material is applicable and will therefore be helpful to the builder in trouble. I would like to have seen one *complete and exhaustive manual* for the radio instead of the “two-manual plus a web page” system that is in place right now. On the whole, however, they have done an admirable job with this product, and I would happily recommend it to anyone who has an interest in kit-building a QRP CW machine.

The complete article and a downloadable PDF can be found at : <https://gloucestercountync.weebly.com/qrp-labs-qcx.html>



# Gloucester County Amateur Radio Club

## General Membership Meeting Minutes

### Wednesday, December 6, 2000



Meeting opened @ 2005 Hours by President Art Strong KA2DOT, with the Pledge of Allegiance To Flag.

Visitors : Mark Smith N2MR; Daniel Damiano KC2ELC

Recording Secretary's minutes were read and approved as read.

#### Committee reports :

**Site :** Entry system is not working yet though trying to get it going. Alarm is not on line yet but is next on repair list. When the alarm is repaired the door striker and power supply will be changed for only cost of parts.

**Repeater :** Reports of various noises on machine. **Mike Lipnitz N2FKS**, hasn't checked the repeater for about a year so hopefully he will get out there soon.

**Generator :** Runs great and generates great. Runs at about 210 volts overall with no load. Uses a 12 volt battery to actually spin the generator over in the start mode. Ray has also looked at metal shelters for it at Lowes.

**Database :** The internet server is temporarily down due to the administrator moving. Will be back up in near future. Dues are due January 1, 2001.

#### Elections :

As President I cast my one vote for all uncontested offices with the exception of Trustee which was contested. The general membership accepted the use of a hand count to declare the winner.

#### The elected officers for 2001 are as follows :

- President : Ray Schnapp WB2NBJ
- Vice President : Bob Budd KB2EAH
- Treasurer : Bob Krchnavek K2DAD
- Recording Secretary : Harry Bryant AA2WN
- Recording Secretary Assistant : Bill Blakeley WA2ADB
- Corresponding Secretary : Chris West WA2MVU
- Directors :
  - ♦ Lou Joseph W2LYL
  - ♦ Bob Krukowski KR2U - 3 Year Term
  - ♦ Gene Schoeberlien AA2YO - 3 Year Term
- Trustees :
  - ♦ Gene Wallace N2IMK

Meeting adjourned @ 2038 Hours by President Art Strong KA2DOT, for roast beef, soda, and coffee.

Respectfully submitted by  
Arthur W. Strong KA2DOT, President

# Gloucester County Amateur Radio Club

## Board of Directors Meeting Minutes

### Wednesday, June 18, 2025



Meeting opened @ 1900 Hours by Vice President Ron Block NR2B

#### Attendance :

- President Jon Pearce WB2MNF :
- Vice President Ron Block NR2B : Present
- Treasurer John O'Connell K2QA : Present
- Recording Secretary John Zaruba Jr K2ZA : Present
- Corresponding Secretary Mike Resnick N2WOQ : Present
- Director (2023-2025) Chris Prioli AD2CS : Present
- Director (2023-2025) James Wright N2GXJ : Present
- Director (2024-2026) Al Arrison KB2AYU : Present
- Director (2024-2026) Bill Price NJ2S : Present
- Director (2025-2027) Jeffrey Garth WB2ZBN : Present
- Director (2025-2027) Frank Romeo N3PUU : Present
- Trustee (2022-2025) Charles Lanard KD2EIB :
- Trustee (2023-2026) Sheldon Parker K2MEN :
- Trustee (2024-2027) Len Rust W2LJR :
- Trustee (2025-2028) Earl Moore KC2NCH : Present
- Member Karl Frank W2KBF : Present

#### New Member Applications :

- Denver Edwards KE2GFG, Elmer, NJ
- Ron Newman KE2DPO, Millville, NJ (Returning Member)
- Rosemarie Newman KE2DPP, Millville, NJ (Returning Member)
- Aidan Pham KE2GFK, Mickleton, NJ (Student Member)

#### Treasurer's Report :

- Income : \$10,139.16
- Expense : \$6,084.29
- Net : \$4,054.87

Detailed financial statements are available for member review upon request.

#### Committees :

- Clubhouse : Al Arrison KB2AYU reported on the status of the tower and EME dish projects.
- HamFest : Ron Block NR2B discussed the on-going project documentation for the HamFest.
- Technical : Chris Prioli AD2CS reported on repairs on the TS-480 and the substitute FT-991A for the remote HF station.
- Programs : Ron Block NR2B reported on upcoming General Membership Meeting programs.
- Education : Chris Prioli AD2CS reported on license testing results from the Woodruff School students and the proposed STEM Camp. He also reported on the current total of license exams given year to date along with the status of the Yagi build class.

*June 2025 Board of Directors Meeting Minutes - Continued on page 50*

- **Repeaters : John Zaruba K2ZA** reported that he has secured post-retirement access to the DMR repeater on Rowan University campus. **Frank Romeo N3PUU** reported that the application to Brandmeister for a talk group has been sent.
- **Field Day : Jim Wright N2GXJ** provided an update on preparations.
- **Foundation : John O'Connell K2QA** discussed current financial status of the foundation and projects.
- **Foxhunt Report : Frank Romeo N3PUU** talked about the results of the latest fox hunt.

#### Old Business :

- Motion to approve previous meeting minutes passed by voice vote of Club officers present.
- Motion to approve the Treasurer's report passed by voice vote of Club officers present.
- **Ron Block NR2B** discussed performing an RF noise floor survey prior to the construction of the solar field adjacent to the 4H Fairgrounds.

#### New Business :

- **Frank Romeo N3PUU** discussed the recent Club picnic. Leftover hamburgers, hot dogs and cold cuts are frozen in anticipation of use at Field Day.
- **Ron Block NR2B** discussed **Jon Pearce WB2MNF**'s request to review code of conduct for Zoom meetings.
- Discussion of 50-50 and door prize drawings for the HamFest.
- Discussion of New England Division HAM Xposition request to advertise their event in CrossTalk.
- Motion to establish a restricted fund for Clubhouse maintenance and repair items approved by voice vote of Club officers present.
- Club Nets :
  - ◆ 40 meter has a new frequency : 7.170 MHz (+/- 5 or 10 kHz)
  - ◆ 2 meter nets : May 2025
    - ◇ Tuesday : Average 9.75 check ins
    - ◇ Thursday : Average 7.2 check ins

Meeting adjourned @ 2011 Hours

Respectfully Submitted,  
John Zaruba Jr K2ZA  
Recording Secretary





To Be Added To The DX HONOR ROLL or Update  
Your Number, Please Contact  
Ernest Kraus KD2EAV  
meanddelcanote@verizon.net



Name/Callsign	DXCC
Bill Grim W0MHK	352
Dave Strout W2YC	349
Edward De Fonzo W2DE	339
Darrell Neron AB2E	336
Bob Pantazes W2ARP	290
Gary Castellini N2IEC	280
Vinnie Sallustio N4NYY	275
<b>Sheldon Parker K2MEN</b>	<b>272</b>
John Hill W2HUV	271
<b>Jim Wright N2GXJ</b>	<b>269</b>
Ken Denson WB2P	248
Tony Starr K3TS	244
Dennis Sandole K2SE	231
<b>Art Strong KA0WS</b>	<b>163</b>
<b>Eric Morris N2BRJ</b>	<b>161</b>
Howard Marder WA2IBZ	158
Steve Farney W2SEF	147
Phil Nunzio WA3RGY	144
Rich Subers W2RHS	133
Ben Johnson NE2R	127
Bart Kleczynski AC2PT	124
Marc Federici WM2Y	117
Chuck Capasso WB2PGE	104
Harry Strahlendorf W3DNQ	103
Jim Clark KA2OSV	87
Lee Marino N2LAM	71
<b>Updated As Of 06/20/2025</b>	

*Hmm...It's Saturday and you want to know if someone is at the Clubhouse? Why not call and find out! What!!!*

**W2MMD Clubhouse : 856-244-6914**

*Yes, We Do Have Prince Albert In A Can!*



## Estate Sale of Jere Cossaboom WB2ROP SK of Bridgeton

By Jerry Marinacci KE2CK

I have a list of equipment for sale from the estate of WB2ROP. I'm trying to help his widow sell off his equipment.

### **Estate Sale of WB2ROP. All items are used and untested. Interested parties contact Connie at 856-455-8340 (Please call after 6:00 PM)**

Kenwood 820S ( Frequency Display nonfunctional)	\$350.00
Kenwood SP820 w/ filters	\$125.00
Kenwood SM220 Monitor	\$340.00
Kenwood VFO520	\$125.00
Kenwood TS700S VHF all mode transceiver	\$150.00
Kenwood SP70 Speaker	\$ 65.00
Janel QSA VHF pre-amp	\$ 20.00
Mirage B108 VHF Amplifier	\$100.00
Kenwood TR7930 VHF Mobile	\$ 65.00
Heathkit SB600 Speaker	\$ 25.00
Heathkit Wattmeter HW-102	\$ 50.00
Heathkit Dummyload/Wattmeter HM-2103	\$100.00
Heathkit Dual Wattmeter HM-2141	\$ 75.00
Heathkit Dip Meter in Case HD-1250	\$ 50.00
Heathkit Coaxial Switches 1 unassembled in box	
2 Assembled	\$ 25.00 ea.
Heathkit SB200 HF Amplifier	\$400.00
MFJ Differential T Tuner	\$275.00
Astron RS20 20 Amp Power Supply	\$ 65.00
Astatic B104 Microphones (2 ea.)	\$ 50.00 ea.
Straight Key w/ base	\$ 45.00
B&W Low Pass Filter	\$ 35.00





# Gloucester County 4-H Fair

## **JULY 24TH - 27TH**

275 Bridgeton Pike, RT.77, Mullica Hill, NJ



**SAFE FAMILY FRIENDLY FUN!**



- 4-H Shows & Exhibits
- Kid Activities
- Kiddie Rides (Thurs/Fri 4-10pm, Sat 3-10pm)
- Live Entertainment
- Car Show (Sat 12-5pm)
- Tractor Pulls (Fri/Sat 6pm)
- Livestock Auction (Fri 7:30pm)
- Draft Horse Pull (Sat 7:30pm)
- BBQ Dinner (Thurs/Fri 4-8pm, Sat 1-8pm)
- Jersey Fresh Produce

**\$20 PER CARLOAD- GOOD FOR ALL 4 DAYS!**



2025 Gloucester County 4-H Fair



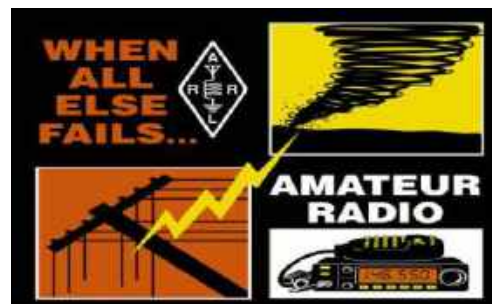
## July Birthdays

*Congratulations To Our Members Who Are  
Celebrating A Birthday This Month*

Diane Amico W2WHD  
John Borelli Jr KD2ZXP  
Todd Buirch  
Alex Calabrese WA2ADS  
Chris Chamberlain N2IVN  
Paul Cosenza KE2RDD  
Jon Davidson KE2DYD  
Herb Dyer KT2Y  
Bert Espanol N3PKH  
Jim Foster W3JNF  
Gary Hewitt N2WHV  
Jerry Jacobus WB2QEF  
Chris Kelly Sr KC2PC  
Lee Marino N2LAM  
Don Martel Sr KE2AIB  
Phyllis Martin W2PDB  
Angela Metzger KE2DRJ  
Charlie Olinda N2SRQ (President 1994)  
Bob Pantazes W2ARP  
Mike Pecorini K2MRP  
Mike Pentimall KC3VTF  
Art Strong KA0WS (President 1999, 2000)  
Mike Talerico  
Charlie Wahl Jr KC2STO  
Rolf Wurmbach KD2VQG  
Micky Zerby W2EFR

## In Memoriam : July Birthdays

Francis Applegate Jr N3DOM  
William Bachman WA2VEE (President 1969)  
Alfred Bestwick N2BTN  
Paul Carr KB2TKV  
Mary Kate Coursey WA2VRR  
Richard Deane Sr KA2BNJ  
Ralph Ditore K2KIT  
Paul Fredricks K2FI  
Wesley Gosbin Jr KB2IRK  
Leon Jones KC2AAA  
John Kull WB2GKH  
John Logan Jr KB2VSE  
Harold Lowther N2EJN  
Alfred Marcy W4ID  
Albert Miller KB2YDX  
Masayoshi Nishina KD2MGU  
Tadeusz Nisiol N2BDC  
Haywood Pelley WA2EVK  
Goldie Rosenberg N2YNB  
Conrad Salati N2HTS  
Edward Sumek W2GSN (President 1989)  
James Swyler WB2ELG  
Alan Trueblood N2FJQ  
Wallace Utley W2CB



## CrossTalk Submissions

*This is your Club Magazine. Make use of it.*

If you have stories or photos of your hobby that you would like to share with the Club, please do so! We will keep covering all of the GCARC events, but it is also nice to get those personal perspectives to include in every issue. Connecting through experiences is what makes the Gloucester County Amateur Radio Club a *REAL* Club.

All submissions, queries, comments, and editorials should be addressed to :  
Jeff Garth WB2ZBN at [djgrath1 <at> gmail <dot> com](mailto:djgrath1@gmail.com)

Submission deadline for the August 2025 issue : Sunday, July 20, 2025

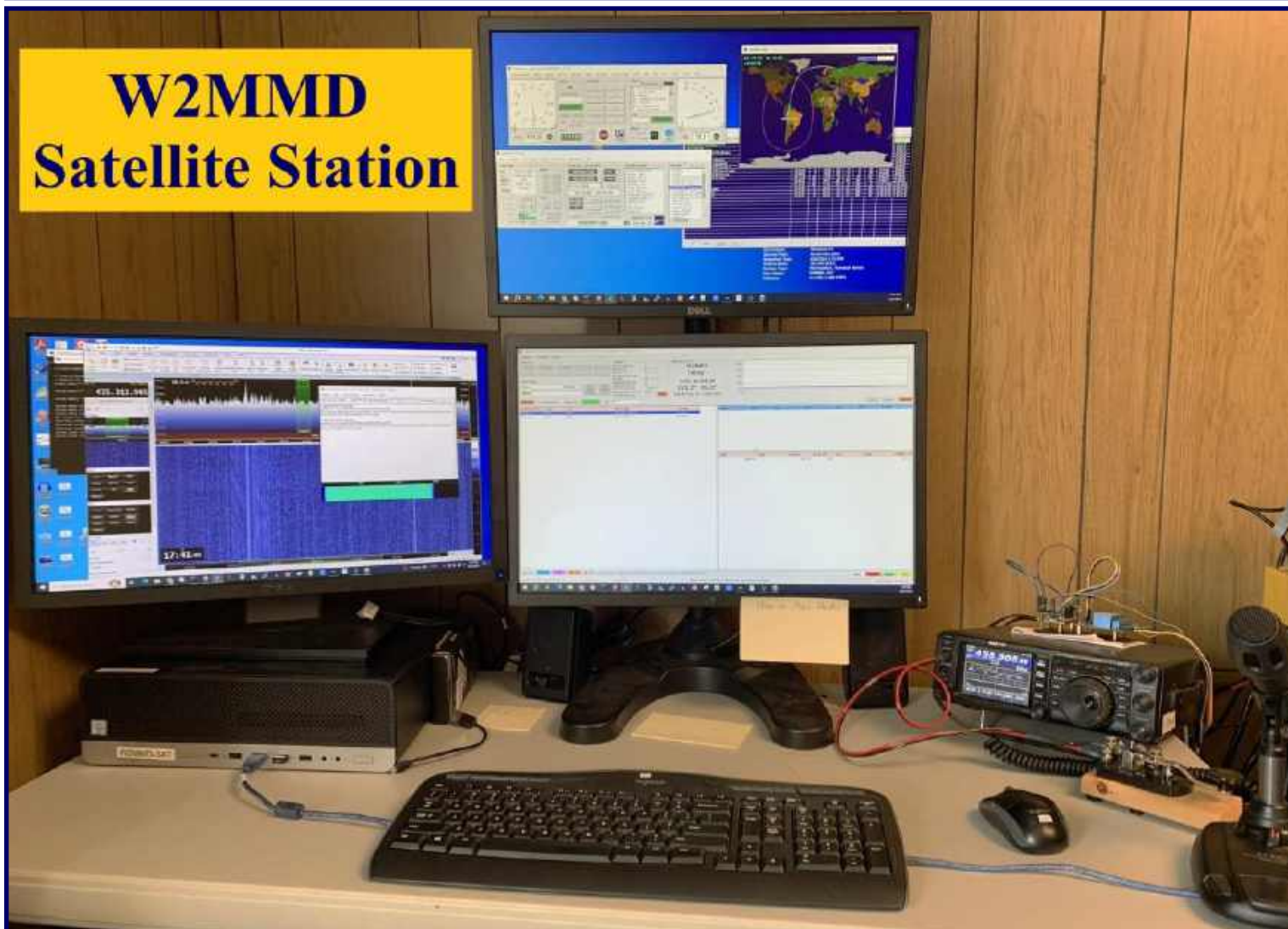
Club Website [www.w2mmd.org](http://www.w2mmd.org)

Club E-Mail Reflector : GCARC <at> Mailman <dot> QTH <dot> Net

# Another FREE Clubhouse Resource Available To All Club Members

Training May Be Required : See Jon Pearce WB2MNF For Details

## W2MMD Satellite Station



**Full Buck Moon - Thursday, July 10, 2025 @ 1637 Hours.**



At this time, the antlers of bucks (male deer) are in full growth mode. This Native American name was noted by Captain Jonathan Carver during his travels in the 1760s. Other animal-related names include Feather Moulting Moon (Cree) and Salmon Moon, a Tlingit term indicating when fish returned to the area and were harvested. As far as the plant world, there was Berry Moon (Anishinaabe), Moon When the Chokecherries are Ripe (Dakota), Month of the Ripe Corn Moon (Cherokee), and Raspberry Moon (Algonquin, Ojibwe), among others. Thunder Moon (Western Abenaki) and Halfway Summer Moon (Anishinaabe) are other variants.

Old Farmer's Almanac - [www.almanac.com](http://www.almanac.com)



# Announced DX Operations

[www.ng3k.com/Misc/adxo.html](http://www.ng3k.com/Misc/adxo.html)

From The Shack of Bill Feidt NG3K : [www.ng3k.com](http://www.ng3k.com)

2025 Jun25	2025 Jul31	Morocco	CN2DX	F5LRL	<a href="#">DXW.Net</a> 20250521	By F5LRL fm nr Kenitra; 40-6m; CW SSB FT8; to continue until Aug 30
2025 Jun26	2025 Jul04	Ogasawara	JD1BMH <small>NEW</small>	JD1BMH Buro	<a href="#">OPDX</a> 20250620	By JG7PSJ fm Chichijima (IOTAAS-031); 40-10m, perhaps 80m; CW SSB RTTY; QSL via JG7PSJ direct
2025 Jun27	2025 Jun29	Puerto Rico	KP4NET	LoTW	<a href="#">OPDX</a> 20250614	By KP3JAC NP4AD WP3B fm Vieques I (IOTA NA-249); 40 20 10m; CW SSB
2025 Jun28	2025 Jul14	St Pierre & Miquelon	FP	LoTW	<a href="#">TDDX</a> 20241219	By KV1J as FP/KV1J fm Miquelon I; HF + 6m; mainly SSB FT4 FT8, some CW; QSL via KV1J (B/d) or Club Log OQRS
2025 Jun29	2025 Jul03	Iceland	TF	LoTW	<a href="#">OPDX</a> 20250610	By N6ELF as TF/N6ELF fm various TF POTAs; 30-10m; SSB FT8; 20w; QSL via N6ELF direct w/ SASE
2025 Jun30	2025 Jul05	Dodecanese Is	SV5	LoTW	<a href="#">TDDX</a> 20250521	By S55DX as SV5/S55DX fm Kos I (IOTA EU-001); HF; QSL via S55DX (B/d)
2025 Jun30	2025 Jul05	Turkey	TC0MAR	HA8LLH	<a href="#">DXW.Net</a> 20250610	By HA8PX HA8LLH YO5OED fm Marmara I (IOTAAS-201); 30-15m
July						
2025 Jul03	2025 Jul10	Honduras	HR9	LoTW	<a href="#">DXW.Net</a> 20241222	By K6VHF as K6VHF/HR9 fm Roatan I; 80-6m; SSB CW RTTY FT8 FT4; 100w; QSL via K6VHF Buro or Club Log OQRS
2025 Jul05	2025 Jul11	Mozambique	C94RRC	Club Log OQRS	<a href="#">DXW.Net</a> 20250522	By OK8AU UA3QLC R7AL fm Inhacamba I (IOTA AF-103); HF; CW SSB FT8; 2 stations
2025 Jul05	2025 Jul15	Grenada	J38DX	LoTW	<a href="#">OPDX</a> 20250213	By GM5RDX and J38LD fm Calliste (IOTA NA-024, FK92ca); 80-10m; 100w; QSL via Club Log OQRS
2025 Jul08	2025 Aug06	Benin	TY5FR	LoTW	<a href="#">OPDX</a> 20250610	By DL1BUG fm Cotonou (JJ16fi); 80-10m; CW SSB; 100; QRV for IARU HF; QSL via DL1BUG Buro or Club Log OQRS
2025 Jul10	2025 Jul15	Cyprus	5B	LoTW	<a href="#">DXW.Net</a> 20250603	By WJ2O as 5B/WJ2O; HF; QRV for IARU Contest; QSL via N2ZN
2025 Jul11	2025 Jul25	Iceland	TF	VE2XB	<a href="#">TDDX</a> 20250203	By VE2XB as TF/VE2XB; 160-6m
2025 Jul13	2025 Jul19	Mozambique	C93RRC	Club Log OQRS	<a href="#">DXW.Net</a> 20250522	By OK8AU UA3QLC R7AL fm Chiloane I (IOTA AF-098); HF; CW SSB FT8; 2 stations
2025 Jul14	2025 Jul23	Svalbard	JW0V	I8KHC	<a href="#">DXW.Net</a> 20250408	By OK2WX; 160-6m; CW SSB FT8
2025 Jul16	2025 Jul19	Dodecanese	SV5 <small>NEW</small>	LoTW	<a href="#">DXW.Net</a> 20250621	By WJ2O fm Rhodes as SV5/WJ2O; HF; QSL via N2ZN
2025 Jul17	2025 Jul24	Aland Is	OH0 <small>NEW</small>	LoTW	<a href="#">OPDX</a> 20250619	By DL4XT as OH/DL4XT; 40 20 15 10m; CW SSB; QSL via Club Log OQRS
2025 Jul17	2025 Jul25	Maldives	8Q7YY <small>NEW</small>	OH7O	<a href="#">DXW.Net</a> 20250621	By OH7O fm Rakeedhoo I; HF; mainly SSB, some FT8
2025 Jul24	2025 Aug02	Svalbard	JW	LoTW	<a href="#">DXW.Net</a> 20250614	By SP9HGN as JW/SP9HGN fm SOTAs JW/VS-265, JW/VS-413, JW/MS-154; 40-10m; SSB FT8; EFHW
RSGB IOTA Contest (Jul 26-27, 2025) Check here for pericontest activity too.						
2025 Jul28	2025 Aug01	Rodrigues I	3B9SP	Club Log OQRS	<a href="#">DXW.Net</a> 20250529	By DK6SP; 40-6m; CW SSB FT8

Also for your convenience, there is a direct link to NG3K on our website. Click on the NG3K DX Page.



## July 2025 Contest Calendar - WA7BNM Contest Calendar : [www.contestcalendar.com](http://www.contestcalendar.com)

RAC Canada Day Contest	0000Z-2359Z, Jul 1
Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 1
ICWC Medium Speed Test	0300Z-0400Z, Jul 1
QCX Challenge	0300Z-0400Z, Jul 1
Phone Weekly Test	0230Z-0300Z, Jul 2
A1Club AWT	1145Z-1300Z, Jul 2
CWops Test (CWT)	1300Z-1400Z, Jul 2
Mini-Test 40	1700Z-1759Z, Jul 2
VHF-UHF FT8 Activity Contest	1700Z-2100Z, Jul 2
Mini-Test 80	1800Z-1859Z, Jul 2
CWops Test (CWT)	1900Z-2000Z, Jul 2
Walk for the Bacon QRP Contest	0000Z-0100Z, Jul 3 and 0200Z-0300Z, Jul 4
CWops Test (CWT)	0300Z-0400Z, Jul 3
CWops Test (CWT)	0700Z-0800Z, Jul 3
NRAU 10m Activity Contest	1800Z-1900Z, Jul 3 (CW) and 1900Z-2000Z, Jul 3 (SSB) and 2000Z-2100Z, Jul 3 (FM) and 2100Z-2200Z, Jul 3 (Dig)
SKCC Sprint Europe	1900Z-2100Z, Jul 3
NCCC FT4 Sprint	0100Z-0130Z, Jul 4
Weekly RTTY Test	0145Z-0215Z, Jul 4
NCCC Sprint	0230Z-0300Z, Jul 4
K1USN Slow Speed Test	2000Z-2100Z, Jul 4
Venezuelan Ind. Day Contest	0000Z-2359Z, Jul 5
FOC Old School Classic 1960s QSO Party	0000Z-2359Z, Jul 5
NZART Memorial Contest	0800Z-0829Z, Jul 5 (CW) and 0830Z-0859Z, Jul 5 (SSB) and 0900Z-0929Z, Jul 5 (CW) and 0930Z-0959Z, Jul 5 (SSB) and 1000Z-1029Z, Jul 5 (CW) and 1030Z-1059Z, Jul 5 (SSB) and 0800Z-0829Z, Jul 6 (CW) and 0830Z-0859Z, Jul 6 (SSB) and 0900Z-0929Z, Jul 6 (CW) and 0930Z-0959Z, Jul 6 (SSB) and 1000Z-1029Z, Jul 6 (CW) and 1030Z-1059Z, Jul 6 (SSB)
TA VHF/UHF Contest	1200Z, Jul 5 to 1200Z, Jul 6
CQ Worldwide VHF SSB/CW Contest	1200Z, Jul 5 to 1200Z, Jul 6
Marconi Memorial HF Contest	1400Z, Jul 5 to 1400Z, Jul 6
Original QRP Contest	1500Z, Jul 5 to 1500Z, Jul 6
PODXS 070 Club 40m Firecracker Sprint	2000Z, Jul 5 to 2000Z, Jul 6
K1USN Slow Speed Test	0000Z-0100Z, Jul 7
ICWC Medium Speed Test	1300Z-1400Z, Jul 7
OK1WC Memorial (MWC)	1630Z-1729Z, Jul 7
ICWC Medium Speed Test	1900Z-2000Z, Jul 7
RSGB 80m Club Championship, CW	1900Z-2030Z, Jul 7
ARS Spartan Sprint	0000Z-0200Z, Jul 8
Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 8
ICWC Medium Speed Test	0300Z-0400Z, Jul 8
DARC RTTY Sprint	1800Z-1929Z, Jul 8
Phone Weekly Test	0230Z-0300Z, Jul 9
A1Club AWT	1145Z-1300Z, Jul 9
CWops Test (CWT)	1300Z-1400Z, Jul 9
Mini-Test 40	1700Z-1759Z, Jul 9
VHF-UHF FT8 Activity Contest	1700Z-2100Z, Jul 9
Mini-Test 80	1800Z-1859Z, Jul 9
CWops Test (CWT)	1900Z-2000Z, Jul 9
CWops Test (CWT)	0300Z-0400Z, Jul 10
CWops Test (CWT)	0700Z-0800Z, Jul 10
NCCC FT4 Sprint	0100Z-0130Z, Jul 11
Weekly RTTY Test	0145Z-0215Z, Jul 11
NCCC Sprint	0230Z-0300Z, Jul 11
K1USN Slow Speed Test	2000Z-2100Z, Jul 11
IARU HF World Championship	1200Z, Jul 12 to 1200Z, Jul 13
SKCC Weekend Sprintathon	1200Z, Jul 12 to 2400Z, Jul 13
QRP ARCI Summer Homebrew Sprint	2000Z-2300Z, Jul 13
4 States QRP Group Second Sunday Sprint	0000Z-0200Z, Jul 14
K1USN Slow Speed Test	0000Z-0100Z, Jul 14
ICWC Medium Speed Test	1300Z-1400Z, Jul 14
OK1WC Memorial (MWC)	1630Z-1729Z, Jul 14
ICWC Medium Speed Test	1900Z-2000Z, Jul 14

July 2025 Contest Calendar - Continued on page 58

# July 2025 Contest Calendar - WA7BNM Contest Calendar : [www.contestcalendar.com](http://www.contestcalendar.com)

## July 2025 Contest Calendar - Continued from page 57

Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 15
ICWC Medium Speed Test	0300Z-0400Z, Jul 15
Phone Weekly Test	0230Z-0300Z, Jul 16
A1Club AWT	1145Z-1300Z, Jul 16
CWops Test (CWT)	1300Z-1400Z, Jul 16
Mini-Test 40	1700Z-1759Z, Jul 16
VHF-UHF FT8 Activity Contest	1700Z-2100Z, Jul 16
Mini-Test 80	1800Z-1859Z, Jul 16
CWops Test (CWT)	1900Z-2000Z, Jul 16
RSGB 80m Club Championship, SSB	1900Z-2030Z, Jul 16
Walk for the Bacon QRP Contest	0000Z-0100Z, Jul 17 and 0200Z-0300Z, Jul 18
NAQCC CW Sprint	0030Z-0230Z, Jul 17
CWops Test (CWT)	0300Z-0400Z, Jul 17
CWops Test (CWT)	0700Z-0800Z, Jul 17
NTC QSO Party	1900Z-2000Z, Jul 17
NCCC FT4 Sprint	0100Z-0130Z, Jul 18
Weekly RTTY Test	0145Z-0215Z, Jul 18
NCCC Sprint	0230Z-0300Z, Jul 18
K1USN Slow Speed Test	2000Z-2100Z, Jul 18
LABRE DX Contest	0000Z, Jul 19 to 2359Z, Jul 20
Russian Radio Team Championship	0700Z-1459Z, Jul 19
Trans-Tasman Low-Bands Challenge	0800Z-1400Z, Jul 19
YOTA Contest	1000Z-2159Z, Jul 19
Feld Hell Sprint	1200Z-1359Z, Jul 19
CQ Worldwide VHF Digital Contest	1200Z, Jul 19 to 1200Z, Jul 20
IARU Region 1 70 MHz Contest	1400Z, Jul 19 to 1400Z, Jul 20
North American QSO Party, RTTY	1800Z, Jul 19 to 0559Z, Jul 20
RSGB International Low Power Contest	0900Z-1200Z and 1300Z-1600Z, Jul 20
Run for the Bacon QRP Contest	2300Z, Jul 20 to 0100Z, Jul 21
K1USN Slow Speed Test	0000Z-0100Z, Jul 21
ICWC Medium Speed Test	1300Z-1400Z, Jul 21
OK1WC Memorial (MWC)	1630Z-1729Z, Jul 21
ICWC Medium Speed Test	1900Z-2000Z, Jul 21
Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 22
ICWC Medium Speed Test	0300Z-0400Z, Jul 22
SKCC Sprint	0000Z-0200Z, Jul 23
Phone Weekly Test	0230Z-0300Z, Jul 23
A1Club AWT	1145Z-1300Z, Jul 23
CWops Test (CWT)	1300Z-1400Z, Jul 23
Mini-Test 40	1700Z-1759Z, Jul 23
Mini-Test 80	1800Z-1859Z, Jul 23
CWops Test (CWT)	1900Z-2000Z, Jul 23
CWops Test (CWT)	0300Z-0400Z, Jul 24
CWops Test (CWT)	0700Z-0800Z, Jul 24
RSGB 80m Club Championship, Data	1900Z-2030Z, Jul 24
NCCC FT4 Sprint	0100Z-0130Z, Jul 25
Weekly RTTY Test	0145Z-0215Z, Jul 25
NCCC Sprint	0230Z-0300Z, Jul 25
K1USN Slow Speed Test	2000Z-2100Z, Jul 25
FRAPR 10M Contest	0000Z, Jul 26 to 2359Z, Jul 27
MARAC US Counties QSO Party	0000Z, Jul 26 to 2400Z, Jul 27
ARAM 50 MHz Contest	1200Z, Jul 26 to 1200Z, Jul 27
RSGB IOTA Contest	1200Z, Jul 26 to 1200Z, Jul 27
Alabama QSO Party	1500Z, Jul 26 to 0300Z, Jul 27
ARS Flight of the Bumblebees	1700Z-2100Z, Jul 27
K1USN Slow Speed Test	0000Z-0100Z, Jul 28
ICWC Medium Speed Test	1300Z-1400Z, Jul 28
OK1WC Memorial (MWC)	1630Z-1729Z, Jul 28
ICWC Medium Speed Test	1900Z-2000Z, Jul 28
RSGB FT4 Contest	1900Z-2100Z, Jul 28
Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 29
ICWC Medium Speed Test	0300Z-0400Z, Jul 29
Phone Weekly Test	0230Z-0300Z, Jul 30
A1Club AWT	1145Z-1300Z, Jul 30
CWops Test (CWT)	1300Z-1400Z, Jul 30
Mini-Test 40	1700Z-1759Z, Jul 30
Mini-Test 80	1800Z-1859Z, Jul 30
CWops Test (CWT)	1900Z-2000Z, Jul 30
CWops Test (CWT)	0300Z-0400Z, Jul 31
CWops Test (CWT)	0700Z-0800Z, Jul 31

## 2025 Club Committees

### Standing Committees

Budget  
 Constitution & By-Laws  
 Education  
 Field Day  
 Hamfest  
 Health, Welfare, & Silent Keys  
 Hospitality  
 Membership & Membership Badges  
 Publicity  
*Repeaters*  
 Volunteer Examiner Liaison  
 W2MMD Clubhouse Site

### Committee Chairs

John O'Connell K2QA  
 Ron Block NR2B  
 Chris Prioli AD2CS  
 Jim Wright N2GXJ  
 Ron Block NR2B  
 Bill Price NJ2S  
 Jeff Garth WB2ZBN  
 Chris Prioli AD2CS  
 Mike Resnick N2WOQ  
*Open Chair*  
 Chris Prioli AD2CS  
 Al Arrison KB2AYU

### Activity Committees

Awards & Certificates  
 Club Photographer  
 Club Publications & Historian  
 Contests  
 GCARC Foxhunts  
 GCARC Picnic  
 GC-ARES Emergency Coordinator  
 Holiday Dinner Party  
 Membership Roster Database  
 Nominations  
 Programs : General Membership Meetings  
*Radio Nets*  
 Technical (Tech Saturday, TechNets)  
 W2MMD License Trustee  
 W2MMD Special Event Station

### Committee Chairs

GCARC Board of Directors  
 Phil Nunzio WA3RGY  
 Jeff Garth WB2ZBN  
 Tony Starr K3TS  
 Jim Wright N2GXJ  
 Frank Romeo N3PUU  
 Bob Keogh KD2NEC  
 Beth Barnish KB2EAL  
 Jeff Garth WB2ZBN  
 Jon Pearce WB2MNF  
 Ron Block NR2B  
*Open Chair*  
 Jon Pearce WB2MNF  
 Darrell Neron AB2E  
 Mark Gottlieb KK2L

### GCARC <at> Mailman <dot> QTH <dot> Net e-mail reflector guidelines

1. **No attachments** (e.g. pictures, files) are allowed on the reflector.
2. If you have Club-related pictures that you would like to share, you can send them to the webmaster, he will put them on the website and will send out a general e-mail to all the members.
3. Otherwise, the pictures will have to be sent to the members' addresses.
4. URLs/Hyperlinks are acceptable on the reflector.
5. Do not send any messages with e-mail addresses in the **BCC (Blind Carbon Copy)** field. The message will be rejected. Use only the **To:** or **CC:** fields.
6. Members are subscribed to the reflector using the member's e-mail address from the roster database. You must use that address when sending an e-mail via the reflector.
7. If you use another address on the reflector, the message will get rejected or "*bounced*", because the reflector does not recognize that address. Whenever a message sent to reflector is rejected or "*bounced*" for various reasons, the administrator has to log-in to the Mailman.QTH website and approve the message.



## The W2MMD Repeaters

### 2 Meter Repeater

Output : 147.180 MHz

Input : 147.780 MHz

Offset : +600 kHz - PL : 131.8 Hz

(Conventional FM plus C4FM Capability)

**EchoLink : W2MMD-R**

### 70 cm Repeater

Output : 442.100 MHz

Input : 447.100 MHz

Offset : +5 MHz - PL : 131.8 Hz

(Conventional FM plus C4FM Capability)

The above repeaters are both

located in Pitman, NJ

GPS : 39.728481°, -75.131088°

### 1.25 Meter Repeater

Output : 224.660 MHz

Input : 223.060 MHz

Offset : -1.6 MHz - PL : 131.8 Hz

Location : Sewell, NJ

GPS : 39.746738°, -75.077094°

## Meeting Calendar

### *General Membership Meeting*

**Wednesday, July 02, 2025**

**1900 Hours**

**Pfeiffer Community Center**

**Simulcast Live on ZOOM**

**Meeting ID : 914 7364 1808**

**Passcode : 843147**

**Join ZOOM Meeting Link :**

**<https://bit.ly/3Pt4dLO>**

### *Board of Directors Meeting*

**Wednesday, July 16, 2025**

**1900 Hours**

**W2MMD Clubhouse**

*“Ask not what your Club can do for you,  
Ask what you can do for your Club”*

*- KA2OSV*

*“There’s More To Ham Radio Than  
You Can Possibly Do!”*

*- K3TS*

### **\*\*\* Badges \*\*\***

**Need a new or replacement badge  
Contact “The Badge Man”**

**Chris Prioli AD2CS  
chris@ad2cs.com**

### SKYWARN™ Net

Sunday @ 1930 : 147.180 MHz Repeater

### Gloucester County ARES Net

Sunday @ 2000 : 147.180 MHz Repeater

### GCARC TechNet ZOOM Forum

Available Every Monday @ 1930 Hours

**Join ZOOM Meeting Link :**

**<https://bit.ly/3K8bWwj>**

**Tuesday Afternoon 2M Net @ 1200 Hours**

**Monday & Thursday Night 40M Net**

**1930 Hours**

**7.170 MHz (Plus or Minus 5 or 10 kHz)**

**Thursday 2M Net @ 2000 Hours**

**All 2 Meter Nets Are Also On EchoLink :  
W2MMD-R**

Question Pool Answers : E3B01:A; E3B02:C; E3B03:C; E3B04:B; E3B05:D; E3B06:B; E3B07:C; E3B08:C; E3B09:A; E3B10:A; E3B11:D; E3B12:B; E3B13:A